

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

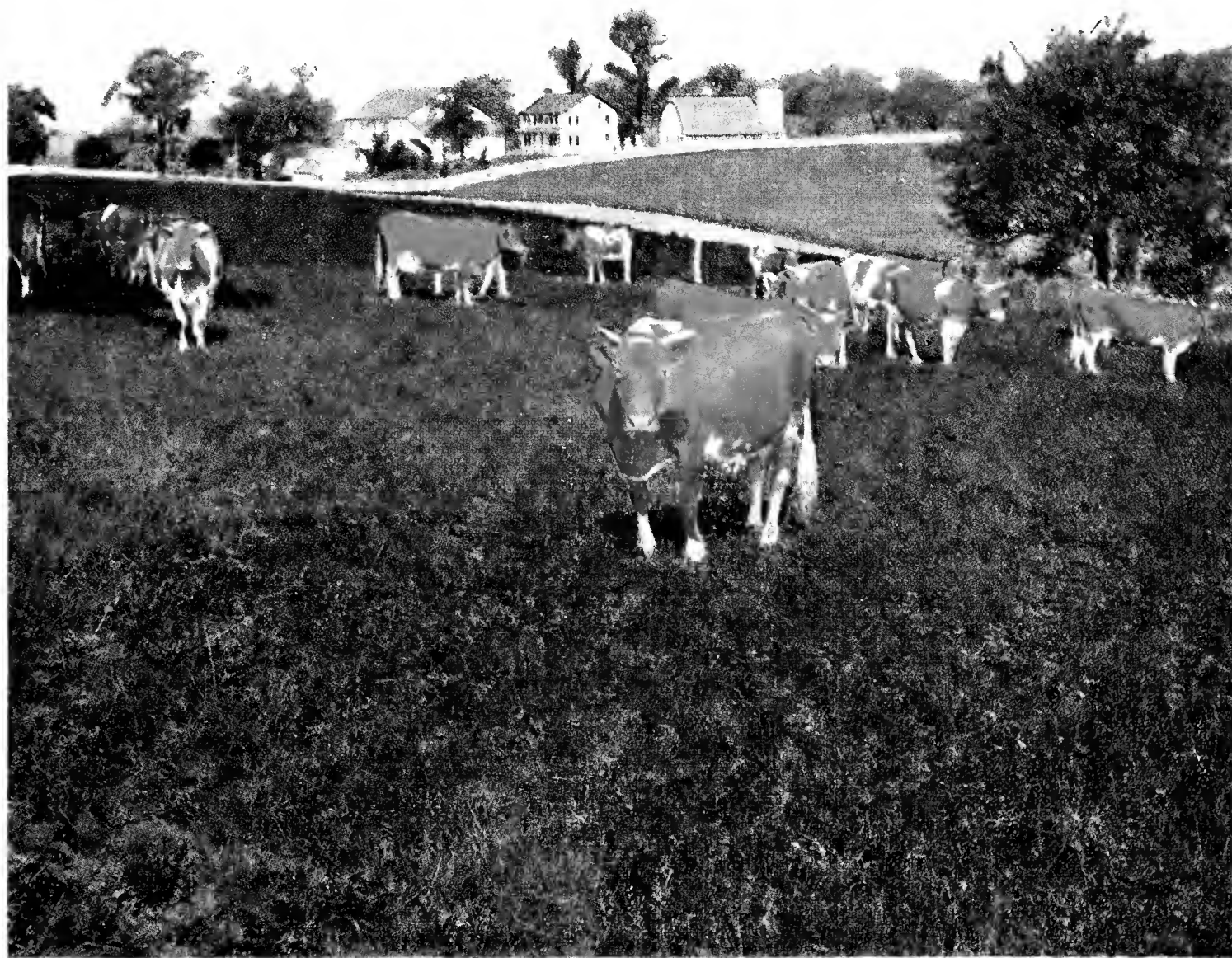
62.73
SCOTT'S

♦ **for 1938** ♦

LIBRARY
RECEIVED

★ FEB 24 1938 ★

U. S. Department of Agriculture.



SEEDS

**EVERYTHING FOR FARM
GARDEN and POULTRY**

♦ ESTABLISHED 1876 ♦

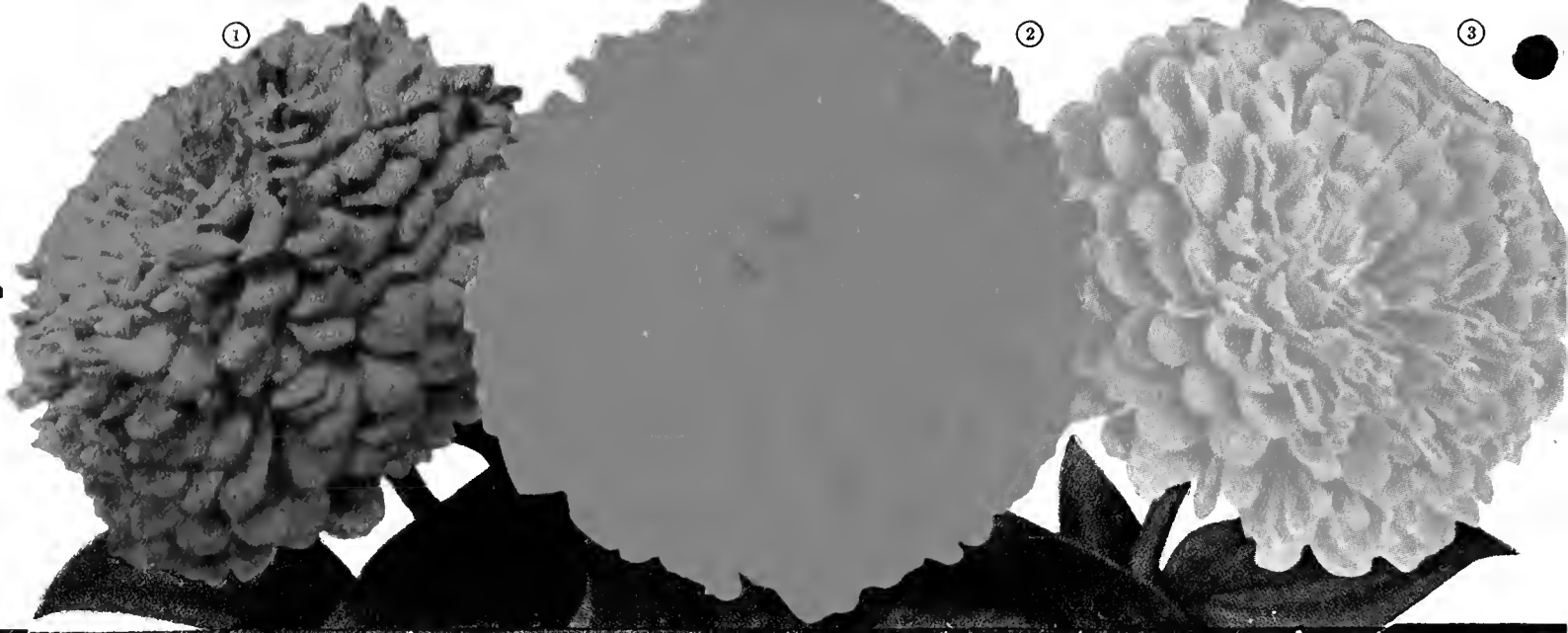
The I. W. SCOTT COMPANY

500 LIBERTY AVE. • 113 DIAMOND ST. • PITTSBURGH, PA.

Zinnia

Giant Double
Dahlia-flowered

1. Crimson Monarch
Pkt. 15 cts.
2. Oriole
Pkt. 15 cts.
3. Illumination
Pkt. 15 cts.

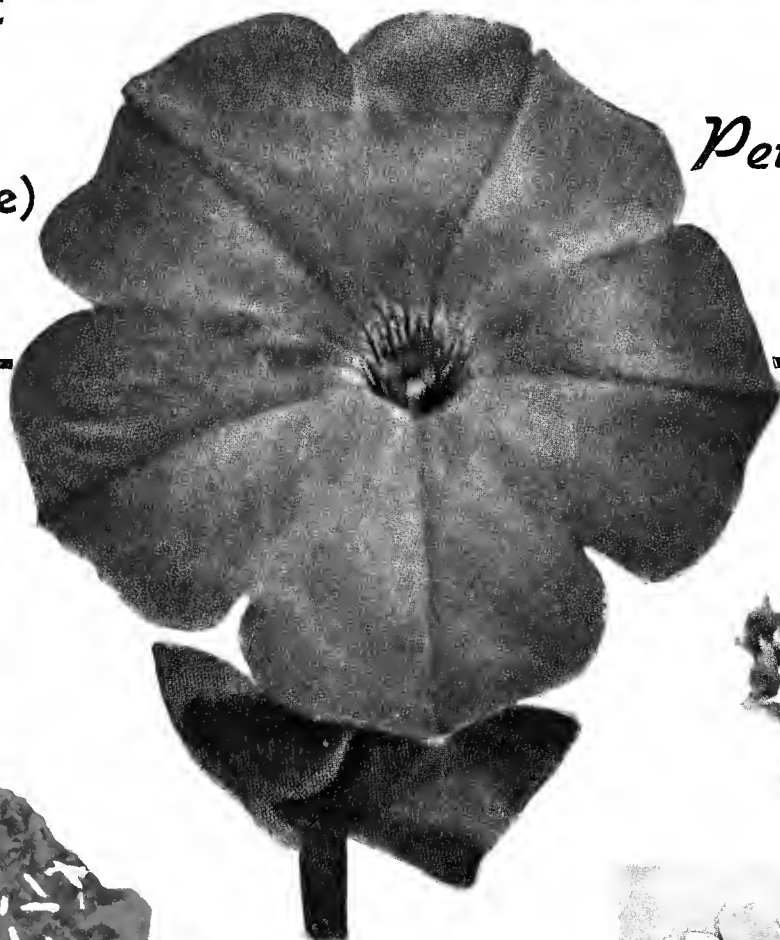


ONE PACKET EACH OF THESE

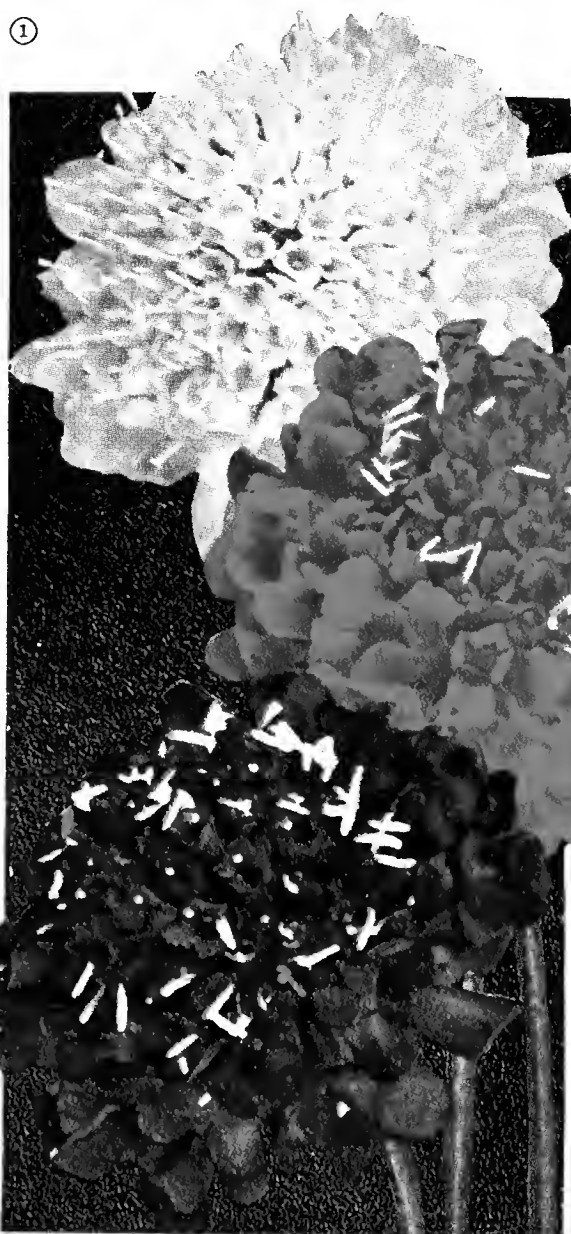
10 Varieties

for **\$/.20** (\$1.50 Value)

COLLECTION A



Petunia. BLUE BEDDER
Pkt. 15 cts.



Scabiosa

MOURNING BRIDE

1. Azure Fairy. Pkt. 15 cts.
2. Cherry-Red. Pkt. 15 cts.
3. Black Prince. Pkt. 15 cts.

Verbena

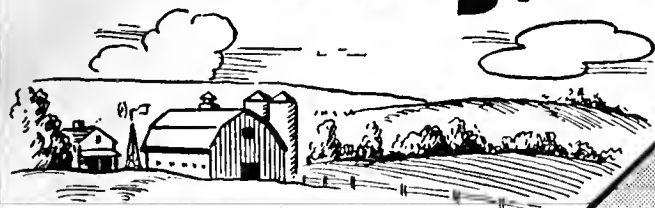
1. Lavender Glory.
Pkt. 15 cts.
2. Salmon-Pink.
Pkt. 15 cts.
3. Beauty of Oxford.
Pkt. 15 cts.



Your Success



In Farming, Gardening & Poultry-Raising



Is Our Success

A successful seed and implement store must have successful customers—customers who get satisfactory results from their efforts. We believe, and have believed since 1876, that seeds and supplies play an important part in the success of farmers, gardeners, and poultry-raisers. And to this end we maintain an able and active personnel trained to select and approve every article we offer for sale. As everyone knows, poor quality equipment and supplies do not pay because pennies saved on cheap merchandise equal dollars lost in final results.

January, 1938

You will find as you go through this catalogue that Scott's merchandise is **TOP-QUALITY**—the only kind it will pay you to use. Take time to go through it carefully—its pages are filled with profitable information about planting, cultivating and, in general, the hundreds of other things you do in your everyday gardening life. Keep it in a handy place—it will be your friend throughout the year.

We appreciate the good will and continued patronage of our many customers, and welcome with pleasure the new friends we hope to serve this year.

THE I. W. SCOTT COMPANY

General Information

FREE DELIVERY

At prices named in this Catalogue, on Vegetable Seeds, Flower Seeds, Grass Seeds, and Bulbs, *We Deliver Free* anywhere in the United States.

On other goods where the order amounts to \$2 or more {except where priced otherwise}, *We Deliver Free* in Pennsylvania, Ohio and West Virginia. Customer pays transportation charges on orders less than \$2.

Free deliveries are made at our option by truck, or by mail, express, or freight to your nearest post office, express office, or freight station.

Parcel Post Shipments

Where the Catalogue provides that postage be added to the remittance, include for postage as follows:

Smaller than 1-lb.	20-lb. package....	\$0.30
package.....	25-lb. package....	.37
1-lb. package.....	50-lb. package....	.65
2-lb. package.....	Smaller than 1-pt.	
3-lb. package.....	package.....	.08
4-lb. package.....	1-pt. package....	.10
5-lb. package.....	1-qt. package....	.15
10-lb. package.....	1/2-gal. package...	.20
15-lb. package.....	1-gal. package...	.25

Order Early. Our rush season comes in the months of April and May. To relieve congestion and reduce to a minimum the delay in filling orders, we solicit the cooperation of our customers by placing their orders early and taking delivery before the rush begins.

Price Changes. Prices are subject to change without notice. Should the price of any commodity be reduced, the difference in price will be refunded, or in case of advance, the customer will be notified before shipping.

Quantity Rates. Half-bushels will be furnished at bushel rates; half-pecks at the peck rate; and half-pounds at the pound rate.

Terms. Our terms are cash with order, and prices are net, with no discounts. Remittances should be sent by Money Order, Registered Letter, Bank Draft, or Check. Amounts less than \$1 may be sent in postage stamps.

Charge accounts may be arranged for at our office.

C. O. D. We will accept orders for shipment C. O. D. except on shrubs, roses, cabbage and strawberry plants, or other perishable goods.

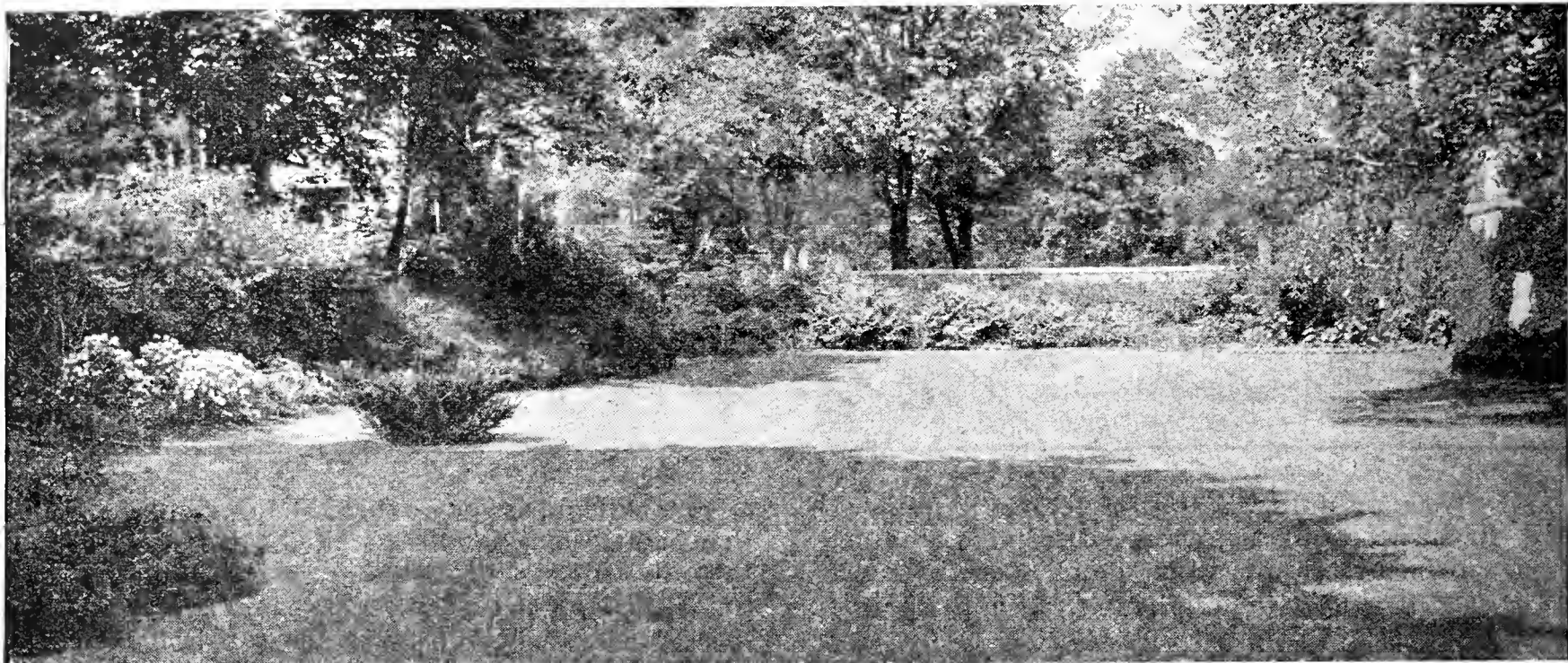
Non-Warranty. We give no warranty, expressed or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, or plants we sell, and will not be responsible for the crop. No responsible seedsman gives any warranty. If the purchaser does not accept the seeds on these terms, they are to be returned at once.

The I. W. SCOTT COMPANY

500 Liberty Avenue }
113 Diamond Street } **PITTSBURGH, PA.**

Telephone ★ *Atlantic 2022*

MAIL AND TELEPHONE ORDERS GIVEN
PROMPT AND CAREFUL ATTENTION



Scott's Lawn Grass Mixtures

The first and most important requirement for a smooth, lasting green lawn is pure, vigorous seed of the most suitable varieties of grass. No one kind of grass will meet all the varying conditions of climate and soil. For best results it is necessary to sow a mixture of different sorts, but to avoid trouble with weeds and have a solid green lawn at all times and under all conditions, such a mixture must be composed of the right kinds of grass in the right proportions.

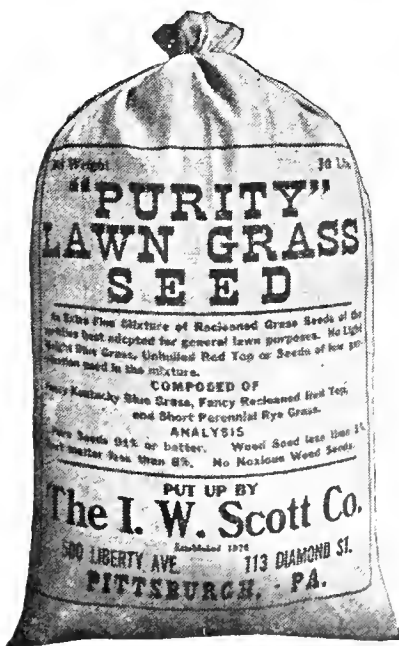
The Scott Lawn Grass Mixtures are made of the best re-cleaned American and European grass seeds it is possible to procure. They contain no "fillers," such as unhulled Red-Top, light-weight Blue Grass, etc., and

they are as free from weeds as the most modern and careful methods of harvesting and cleaning can make them. They have been used in making thousands of fine lawns. Better lawn grass mixtures cannot be made. It pays in the end to sow the best seed. As a rule, good seed costs very little more than low-grade seed and the results are well worth the difference.

Fertilizers. After the soil has been well prepared we recommend that a high-grade fertilizer be used. We have a complete line of fertilizers, and prices and descriptions will be found on pages 56 to 59.

"Lawns, How to Make and Maintain Them." A carefully prepared leaflet, free to those who ask for it.

We are prepared to furnish special Grass Mixtures. Prices will be quoted on receipt of specifications.



Scott's "Purity" Lawn Grass Seed

This mixture, which was developed by us over 25 years ago, has been continually studied and improved and today is without a doubt the best mixture for general lawn sowing. It is composed of the finest re-cleaned varieties of grass seeds in a blend which produces a velvety turf of rich, even green color, which retains its luster from early spring until late in the fall. Sow at the rate of one pound to each 250 square feet, or 150 pounds per acre. A measured bushel will weigh about 27 pounds.

1/2 lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. \$2.25, 10 lbs. \$4, 25 lbs. \$9, 100 lbs. \$32.

Scott's "Superfine" Lawn Seed

For those who desire an extra-fine lawn grass mixture we offer Scott's "Superfine" Lawn Seed. It is composed of the same fine re-cleaned grass seeds as our "Purity" brand but with a quantity of an expensive Bent Grass seed added. It will withstand hard wear as well as the heat and drought of summer and the frost action of winter. One pound will sow 400 square feet, or 100 pounds an acre. A measured bushel will weigh about 32 pounds.

1/2 lb. 35 cts., lb. 60 cts., 2 lbs. \$1.15, 5 lbs. \$2.75, 10 lbs. \$5, 25 lbs. \$11.50, 100 lbs. \$42.

Scott's "Evergreen" Lawn Grass Mixture

We believe this is the best mixture that can be sold at our prices. It is composed of re-cleaned grass seed which will produce a good, thick turf.

1/2 lb. 25 cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. \$1.75, 10 lbs. \$3.25, 25 lbs. \$7.50, 100 lbs. \$25.

Scott's "Purity" Shady Lawn Mixture

A mixture from grasses which we know will thrive in the shade of trees and buildings where ordinary grasses will not prosper. Use the same quantities as for our "Purity" Lawn Grass Seed.

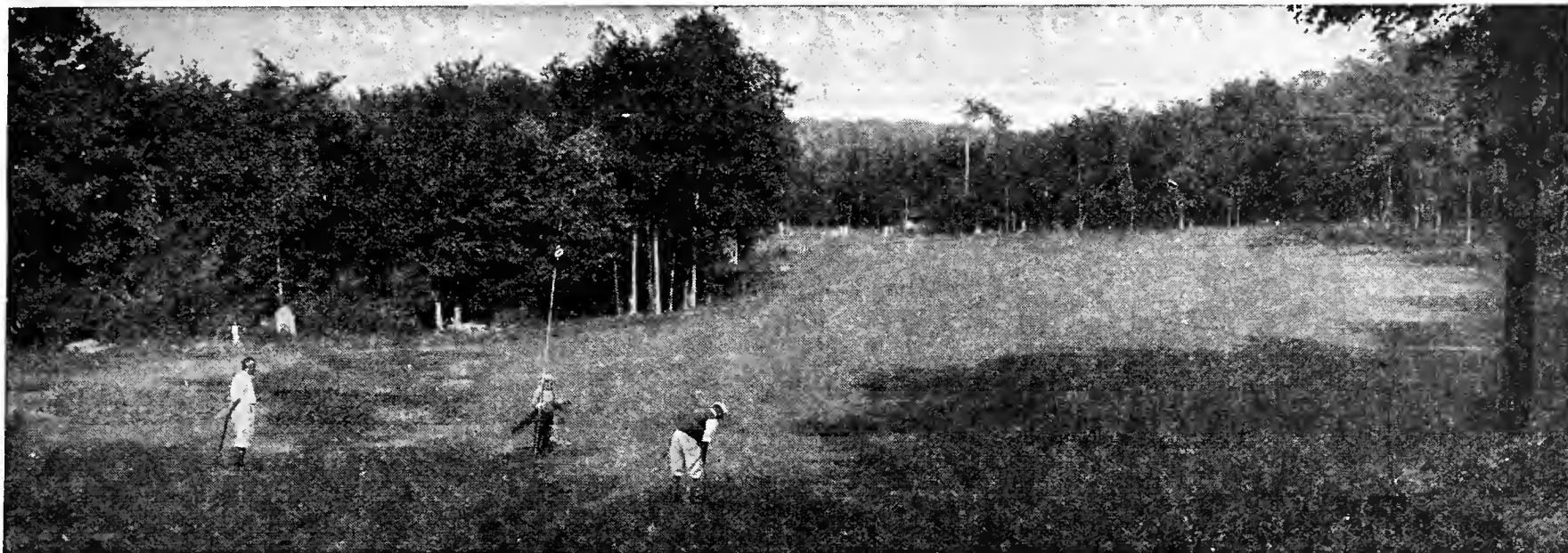
1/2 lb. 35 cts., lb. 60 cts., 2 lbs. \$1.15, 5 lbs. \$2.75, 10 lbs. \$5.25, 25 lbs. \$12, 100 lbs. \$45.

Scott's "Terrace" Lawn Mixture

Terraces and embankments require grasses that establish themselves quickly and produce strong, well-developed root-systems. The grasses used in this mixture are all varieties answering these requirements and will give results.

1/2 lb. 30 cts., lb. 50 cts., 2 lbs. 95 cts., 5 lbs. \$2.25, 10 lbs. \$4, 25 lbs. \$9, 100 lbs. \$32.

All Lawn Grass Mixtures delivered prepaid at above prices



GRASS SEEDS

MIXED CREEPING BENT. A superior Grass for putting-greens on account of its dwarf growth and its narrow leaves. It will grow and make good turf in good or bad soils, and dry weather or heavy rains seem to have no serious effects. About forty pounds of seed are required for an acre. Lb. \$1.25, 10 lbs. \$11, 25 lbs. \$25.

COOS COUNTY BENT or SEASIDE BENT (*Agrostis alba maritima*). A fine-leaved, bright green Grass used principally on golf-courses for putting-greens. Its texture is fine and uniform, and under good cultural conditions, on soils of reasonable fertility, it will form a sod very quickly. It makes a very good growth in rather dense shade, and spreads with great rapidity, largely by surface-creeping stolons that root at the nodes. Lb. \$1.25, 10 lbs. \$11, 25 lbs. \$25.

COLONIAL BENT (*Agrostis capillaris*). A tight, thick turf, permanent under close mowing. Good for putting-greens and fairway mixtures. Lb. \$1.25, 10 lbs. \$11, 25 lbs. \$25.

ASTORIA BENT (*Agrostis capillaris*; *Astorian*). An underground creeper, making a deep, heavy sod of fine texture and color. Lb. \$1.25, 10 lbs. \$11, 25 lbs. \$25.

RED-TOP (*Agrostis alba*). A valuable Grass for hay, pasture or lawn. It will grow on any soil that is not extremely dry. With the possible exception of Kentucky Blue Grass, it surpasses all other Grasses for lawn-making, and is an extra-good variety for golf-grounds and other places where the turf must withstand hard usage. About fifteen to twenty pounds of seed will be required for an acre. We handle nothing but the solid re-cleaned seed, having discarded the unhulled and chaff grades. Lb. 40 cts., 10 lbs. \$3.50, 25 lbs. \$8.

KENTUCKY BLUE GRASS (*Poa pratensis*). Kentucky Blue Grass is most valuable for pastures and lawn planting. For lawns it is indispensable and, when well established, the lawn will last for years, as the Grass makes an extra-close fine-textured turf. The seed should be mixed with other Grasses that mature earlier, for Blue Grass is very slow in both germinating and maturing. Lb. 40 cts., 10 lbs. \$3.50, 25 lbs. \$7.50.

ROUGH-STALKED MEADOW GRASS (*Poa trivialis*). A thick-matting, stoloniferous species which makes a heavy turf and is well adapted to shady situations when sown with other Grasses. Prefers light moisture and does not do well in dry, exposed places. Lb. 75 cts., 10 lbs. \$7, 25 lbs. \$16.25.

DOMESTIC RYE GRASS. A mixture of Italian and English Rye Grass grown in the United States. Quick-growing and often used for a nurse Grass or temporary turf. Lb. 35 cts., 10 lbs. \$3, 25 lbs. \$6.75.

ITALIAN RYE GRASS (*Lolium italicum*). Makes a dense turf when sown thickly or mixed with other Grasses. It is most useful on medium moist soils and grows very rapidly into a bright green sod. Lb. 35 cts., 10 lbs. \$3, 25 lbs. \$6.75.

PACEY'S PERENNIAL RYE GRASS (*Lolium perenne*, *Pacey*).

A fine-leaved Grass, not as coarse as the ordinary variety and more resistant to cold. An excellent green on fairways or anywhere that a quick-growing sod is needed. An excellent nurse Grass for slow-germinating Grasses. Lb. 40 cts., 10 lbs. \$3.50, 25 lbs. \$8.

CHEWING'S NEW ZEALAND FESCUE (*Festuca rubra fallax*). A fine, needle-like sod excellent for putting-greens and lawns. Lb. 85 cts., 10 lbs. \$8, 25 lbs. \$18.75.

RED FESCUE (*Festuca rubra*). A close, long-lasting turf for dry, sandy soils. Excellent at the seashore. Lb. 85 cts., 10 lbs. \$8, 25 lbs. \$18.75.

SHEEP'S FESCUE (*Festuca ovina*). Bluish "bunch Grass," useful for mixtures, for dry lands and pastures. Lb. 85 cts., 10 lbs. \$8, 25 lbs. \$18.75.

HARD FESCUE (*Festuca duriuscula*). A wiry bluish gray Grass for dry lands. Extremely hardy. Lb. 85 cts., 10 lbs. \$8, 25 lbs. \$18.75.

CRESTED DOG'S-TAIL (*Cynosurus cristatus*). A low-growing Grass that makes extra-dense turf in rich, moist soils; is also desirable for putting-greens and lawns. Will grow equally well in the shade or the sun. About seventy pounds of seed will be required for an acre. Lb. 75 cts., 10 lbs. \$7, 25 lbs. \$16.25.

ORCHARD GRASS (*Dactylis glomerata*). A quick-maturing Grass that is used for pasture and hay. It may be cut several times during the year, but it is advisable to use the machine before the plants show the seed-heads. From thirty to thirty-five pounds will be required for an acre. Lb. 50 cts., 10 lbs. \$4.50, 25 lbs. \$10.

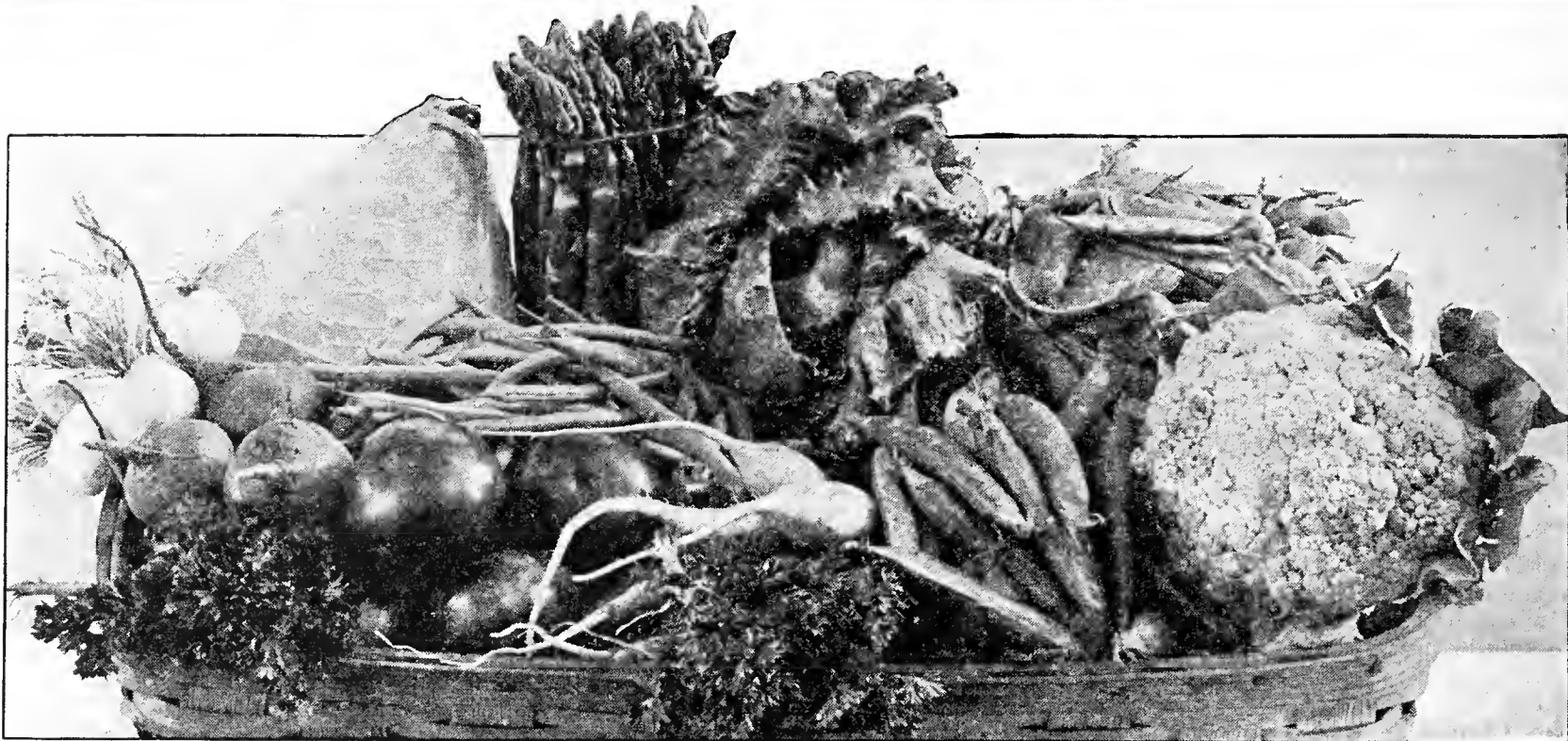
TIMOTHY (*Phleum pratense*). One of the most important hay Grasses, sometimes used to nurse lawns made on rough soil. The most valuable hay plant. Lb. 15 cts., 5 lbs. 60 cts., 10 lbs. \$1.

WHITE DUTCH CLOVER (*Trifolium repens*). Valuable for quick lawns and permanent pastures. $\frac{1}{4}$ lb. 25 cts., $\frac{1}{2}$ lb. 40 cts., lb. 70 cts., 5 lbs. \$3.25, 10 lbs. \$6.

PERMANENT PASTURE MIXTURE

A well-balanced pasture-producing mixture made up of the very highest grades of re-cleaned grass and clover seeds, which will produce an abundant and nutritious food-supply for all kinds of stock. The land should be plowed in the fall, left rough over winter, and prepared in the spring, making the seed-beds as fine as possible by repeated harrowing. After seeding, the lawn should be rolled. An occasional top-dressing of fertilizer high in nitrogen is advisable after the grass is established. Sow 40 pounds to the acre. A bushel weighs about 28 pounds. 5 lbs. \$2.25, 10 lbs. \$4, 25 lbs. \$8.75, 100 lbs. \$32.

Scott's Vegetable Seeds



Quality Always Our First Consideration

For more than 60 years we have been supplying the most critical market-gardeners with the best and purest strains of Vegetable Seeds. The steady increase of our trade during all these years, is the best evidence that our seeds give satisfaction.

The test of a seed is the crop it produces—not the price paid for it. It is always our endeavor to supply only the highest bred and most vigorous seeds it is possible to grow. Even the best of seed is none too good when growing conditions are unfavorable, but poor seed will not produce good results, no matter

how much care and help the crop receives. The old saying, "The best is the cheapest," applies with greater force to seeds than to any other commodity. So with us, we aim to supply the highest quality at a fair price; quality comes first.

All of our packet seeds, both vegetable and flower, are put up from exactly the same stocks that we use for pounds, pecks and bushels, so the small gardener can depend upon getting seeds as fresh and as choice in every way as those which the most critical market-gardeners demand.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

ASPARAGUS

Equally good results may be secured by planting seed or roots; seed is cheaper but from one to two years' time is saved by starting with roots.

Sow seed early in the spring, in shallow drills 12 to 15 inches apart, and when the plants are 4 inches high, thin out to 3 inches apart; transplant to the permanent bed the following spring.

An Asparagus bed should be deeply dug and plenty of manure worked in; set the plants so that the crown is about 3 inches below the bed-level. Barely cover at first, filling in as the plants grow. Do not cut the first year.

*Three ounces of seed will sow a 100-foot row;
15 pounds will sow an acre*

Martha Washington Rust-Resistant. A new variety developed by the U. S. Department of Agriculture. It produces abundant crops of large, tender stalks and is practically immune from "rust" and other Asparagus diseases. Without doubt, the finest strain of Asparagus now available. Seed, pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Two-year-old roots, 50 cts. per doz., \$1.65 for 50, \$2.75 per 100, \$7 for 500, \$12 per 1,000.

Mary Washington. Plants vigorous, very productive and nearly rust-free. Shoots dark green, large, straight, with heavy purple overtone. Seed, pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

Two-year-old roots, 50 cts. per doz., \$1.65 for 50, \$2.75 per 100, \$8 for 500, \$14 per 1,000.

BROCCOLI

A kind of hardy cauliflower which thrives best in moist fall weather. Grow like late cauliflower, sowing in May and transplant in June or early July.

An ounce of seed will produce 2,000 plants

True Italian Sprouting. A distinct variety with large, solid heads that stay green. Many sprouts develop from the leaf-axils after the heads are cut, and each terminates in a small head which is also edible. Pkt. 15 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50.

FRENCH ARTICHOKE

This highly prized salad can be grown in our climate, provided the plants are given light protection over winter. Start the seed indoors and give the same treatment as you would tomatoes, transplanting to the garden in May. The plants are perennial.

An ounce of seed will produce 500 plants

Large Green Globe. The best variety. Pkt. 15 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.50, lb. \$8.

BRUSSELS SPROUTS

The "sprouts" are like miniature cabbages growing along the main stem. Takes the same culture as cabbage.

An ounce of seed will produce 2,000 plants

Half-Dwarf Improved. Pkt. 10 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

BEANS

Everyone Can
Grow Beans

Dwarf Green-podded and Wax Beans

Although the pods of Wax Beans are considered more attractive than those of the green-podded sorts, there is no difference in quality, and personal choice, or market demand, must decide which to grow; they are both delicious and both yield bountiful returns from limited space. Home gardeners will want some of both types. As soon as the ground warms up, plant the Beans $1\frac{1}{2}$ to 2 inches deep and 2 to 3 inches apart; later plantings should be covered $2\frac{1}{2}$ to 3 inches deep. For a constant supply, plant every two weeks from May to August.

**INOCULATE THIS
SEED WITH
FARMOGERM**

A pint of seed will sow 100 feet of furrow; 1 to $1\frac{1}{2}$ bushels, depending on variety, will be required for an acre when the seed is planted in drills.

Dwarf Green-podded Beans

Asgrow Stringless Green-Pod. ★ Four to six days earlier than Full Measure. The pods are long, straight, round, meaty, entirely stringless, and of fine table quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

Asgrow Stringless Black Valentine. ★ A new, hardy, prolific Bean of the true Black Valentine type, wholly without strings. Quick-growing. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Bountiful. ★ A splendid variety, well named, for it is extremely productive and always reliable. The pods are flat, of good size, and handsome appearance, always stringless, tender until full grown and of excellent flavor. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Burpee's Stringless Green-Pod. Early and productive, with pods round, thick and very meaty; always perfectly stringless and tender even when old. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Full Measure. A well-known variety for market-gardens as well as home-gardens. The pods are of good size, round, thick, stringless, tender, and of excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Giant Stringless Green-Pod. ★ A little later to bear than the kinds described above but a very dependable producer of big crops. The pods are long, dark green, round, always stringless and very tender. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.



Bountiful Beans

DWARF GREEN- PODDED, continued

Improved Early Red Valentine. Extra-early strain of the old favorite, Red Valentine. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Italian Black-Eye. A very prolific yielder with long, round, slender pods, dark green in color and stringless. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Stringless Green-Pod Refugee. Perfectly stringless even when old enough to shell. The plants are large, producing heavy crops; pods large, round, and fleshy. Ideal for canning. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Tendergreen. ★ This new, early Bean has perfectly round pods $6\frac{1}{2}$ to 7 inches long, quite slender, straight, light green, tender, absolutely stringless, and of high quality. Very productive. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

The Commodore. Award of Merit, 1938 All-America Selections. Very productive and of excellent quality. Pods long, round, stringless and fiberless in eating stages. Medium early. Plants are vigorous, of upright growth, so that the pods seldom touch the ground. Excellent for home-garden or market. Pkt. 25 cts., $\frac{1}{2}$ pt. 65 cts., pt. \$1, qt. \$1.75.



Tendergreen Beans

Dwarf Wax-podded Beans

Improved Golden Wax. Pods are flat and a little longer and thicker than those of the original Golden Wax. Hardy and prolific; quality fair. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Keeney's Rustless Golden Wax. A good producer of medium-sized, flat, well-filled stringless pods practically rust-proof. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Pencil-Pod Black Wax. A late variety for midseason use. Pods round, long, slender, and of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Round-Pod Kidney, or Brittle Wax. ★ This Bean is superior in flavor, remarkably brittle and tender, and absolutely stringless. The pods are long, round and bright yellow. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

Sure-Crop Stringless Wax. ★ A strong-growing, early variety, producing large crops under all conditions. The pods are of good size, broad, semi-round, and bright yellow in color, entirely stringless, and of fine quality. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$10.

Wardwell's Kidney Wax. An old favorite. Hardy, early, and of splendid quality. The waxy yellow pods are broad, flat, brittle, and almost stringless. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Yellow Bountiful Wax. ★ Very meaty, yellow pods, slightly curved, about 7 inches long, absolutely stringless, and of delicious flavor. Very productive. Practically disease-resistant. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

NOTE: One pint of Beans weighs about 1 lb., 1 quart about 2 lbs., and 1 bushel 60 lbs.

BEANS, continued



Leviathan Pole Lima Beans

Bush Lima Beans

Never plant Bush Lima Beans until the weather is really warm. Plant on edge, with the eye down, 4 to 5 inches apart and 1 inch deep; thin the plants to 8 to 10 inches apart.

*A quart of seed will sow 150 feet of furrow;
a bushel will sow an acre*

Burpee's Bush. A hardy, reliable variety; prolific, medium early, and of good size and quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Burpee Improved. ★ The large bushes bear loads of big, broad pods, each containing 4 to 5 Beans of the largest size and finest quality. Medium early. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

Fordhook. ★ Extra early and extremely prolific, bearing good-sized pods which contain 3 to 5 large, thick, meaty Beans of delicious quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

Wood's Prolific. An improved strain of the small-seeded Lima, valuable for planting where the large-seeded Limas do not thrive. The quality is extra-fine. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Pole Lima Beans

These take longer to bear than the Bush Limas, but yield larger crops and continue to bear for a longer period. The seed is usually planted in hills, at least 3 feet apart each way, dropping 4 to 6 Beans to the hill. Set poles 8 to 10 feet long in each hill to support the vines.

A quart of seed will plant 100 hills; 20 quarts will plant one acre

Carpinteria. Medium-late with large pods, containing 3 to 5 Beans which are very thick and mealy and retain their green color even when ripe. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

Detroit Mammoth. Medium early. Pods 9 to 11 inches long, containing 5 to 7 mammoth Beans of excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

Extra-Early Jersey. Comes into marketable size a week earlier than other varieties. Good size and fair quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

King of the Garden. ★ Broad pods 5 to 6 inches long, containing 4 or 5 large, flat Beans. Allow only two vines to each pole. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

Leviathan. ★ A general favorite, being early, vigorous, and productive, bearing loads of giant pods, well filled with large tender Beans. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

New Potato Lima. One of the heaviest producers of Beans per bushel of pods. A thick Bean of good size and excellent quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.75, bus. \$13.

Siebert's Early. Extra-early and one of the most productive. The Beans are large and thick through and of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

Wax- and Green-podded Pole Beans

Do not plant until the weather is really warm, then cover 6 to 10 Beans 2 inches deep in hills 3 to 4 feet apart, thinning out to 3 or 4 plants to each pole.

*A quart of seed will plant 100 to 150 hills; from 12 to 16 quarts
will plant an acre according to the size of the Beans*

Asparagus, or Yard-Long. A quick-growing Pole Bean with slender, curved pods 2 feet or more in length. Tender and flavorful when young. $\frac{1}{2}$ pt. 45 cts., pt. 75 cts., qt. \$1.25.

Burger's Green-Pod Stringless. Extra-early and prolific, bearing round, brittle pods of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

Golden Cluster Wax. Extra-early, most attractive in appearance and unsurpassed in flavor, but the pods should be picked young. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.50, bus. \$12.

Kentucky Wonder. ★ Early, reliable under all conditions, and immensely productive, bearing long, round, dark green pods of fine quality. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

Kentucky Wonder Wax. ★ A Wax Bean similar in productivity to the green-podded variety. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

King Horticultural. Also known as Pole Roman Bean or Speckled Cranberry. Late but productive. The Beans are extra good, either green or dry. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

Lazy Wife. Late sort with great clusters of richly flavored green pods which are 5 to 6 inches long. Useful also as a Shell Bean. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3.25, bus. \$11.

Scarlet Runner. An ornamental climber whose bright scarlet blossoms are most attractive. The dried Beans are used like Limas. $\frac{1}{2}$ pt. 25 cts., pt. 40 cts., qt. 75 cts., pk. \$4.25, bus. \$15.

Dwarf Green-podded Beans for Shelling

Dwarf Horticultural. Also known as Roman Bean. A fine producer of green and dry Shell Beans, and String Beans. The ripe Beans are round and speckled with purplish red. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Red Kidney. Resembles the White Kidney except that the ripe Beans are red in color. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

White Kidney. Largely grown for dry Shell Beans. The ripe Beans are large, kidney-shaped, pure white and do not discolor when cooked. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

White Marrowfat. The favorite Bean for baking. A good producer of large, white Beans of fine quality. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

White Navy, or Pea Bean. Used mostly for field planting; a sure cropper and extremely prolific. The dried Beans are small, round, and white. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.75, bus. \$9.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

BEETS

Sow seed as early in the spring as possible, in drills 15 to 18 inches apart, covering about 1 inch deep, and thin the plants to 2 to 3 inches apart. Plantings every three weeks until mid-July will furnish a supply of fresh Beets until late fall. Late in June make a large planting to produce Beets for winter use. Harvest before frost and store in pits outdoors, or in a dry cellar. For an extra-early crop start the seed under glass.

An ounce of seed will sow about 50 feet of drill; 6 pounds an acre

Crosby's Extra-Early. ★ Dark red skin and deep red flesh; very uniform in shape and size. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

Detroit Dark Red. ★ Early, smooth, and uniformly globe-shaped, with dark red skin and flesh, fine-grained, tender and sweet. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

Early Blood Turnip. Dark red skin and bright red flesh of good quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

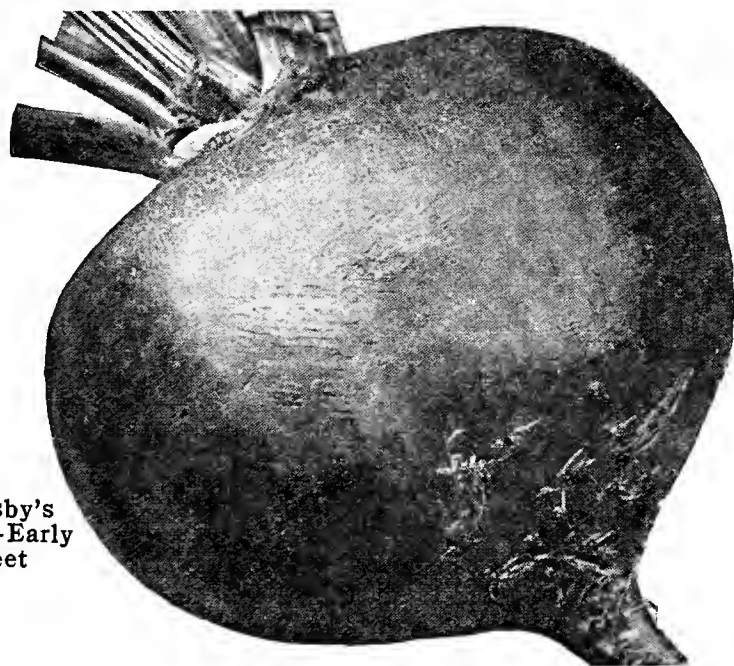
Early Model. Extra-early and top-notch in quality. Uniformly globe-shaped, with smooth, dark red skin and fine-grained, crimson flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

Early Red Chief. This striking new Beet is the result of several years' breeding work. It is faster growing than any other Beet and therefore earlier in reaching a marketable size. The roots are smooth, perfectly globular, deep dark red all the way through, without zoning, of uniform shape and size, with slender taproots. Tops are medium, just right for bunching. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25, 5 lbs. \$5.50.

Early Wonder. ★ Smooth, dark red flesh. Early. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

Extra-Early Egyptian. One of the earliest. Medium-sized, flat, smooth roots with dark crimson skin and flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.

Perfected Detroit. An improved strain of Detroit Dark Red. It is early, with round, dark red root and medium foliage. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1, 5 lbs. \$4.50.



Crosby's
Extra-Early
Beet

SWISS CHARD

One of the best of the vegetables grown for "greens." It takes the same culture as Beets except that the plants should be thinned to stand 8 inches apart. Pull the leaves off as they become ready and new ones will grow in their place.

An ounce of seed will sow about 100 feet of drill

Fordhook Giant. ★ An outstanding new variety with curly, rich blue-green leaves and broad white ribs, of a quality better than spinach. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Lucullus Giant. A tall variety with deeply wrinkled and crumpled leaves. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

MANGEL-WURZEL or CATTLE BEETS

Sow the seed in April or early May and when the plants are 2 or 3 inches high, thin them out to stand 8 to 10 inches apart. Harvest before frost and store in pits outdoors or in a dry, frost-proof cellar.

Four to 5 pounds of seed will sow an acre in drills, 8 to 10 pounds when broadcast

Golden Tankard. ★ Large, long roots unusually high in feeding value. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

Klein Wanzleben. Rigorously selected for high sugar content. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

Long Red Mammoth. ★ Enormous roots which grow largely above ground and are easy to harvest. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

Norbiton Giant Long Red. Somewhat similar to the above. Excellent for feeding to stock. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

Red Globe. Oval or globe-shaped, giving heavy yields on shallow soils. A good keeper. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

White Sugar. Very productive, rich in sugar and especially good for stock-feeding. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25.

Long Red
Mammoth
Mangel-
Wurzel



CHICORY

The Large-rooted variety is grown for its roots, which may be cooked and served like turnips.

The Witloof variety is highly esteemed as a winter salad, for which purpose the plants are taken up in the fall, cut back nearly to the top of the root, and then covered with soil in a box or trench in a warm cellar. The new leaves which grow from the old roots in about a month's time are nearly white, crisp and of a fine, piquant flavor. Sow Chicory seed in April or May, in shallow drills, and thin the plants to stand 4 to 6 inches apart.

An ounce will sow about 100 feet of drill

Large-Rooted. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.35.

Witloof. Sometimes called French Endive. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.35.

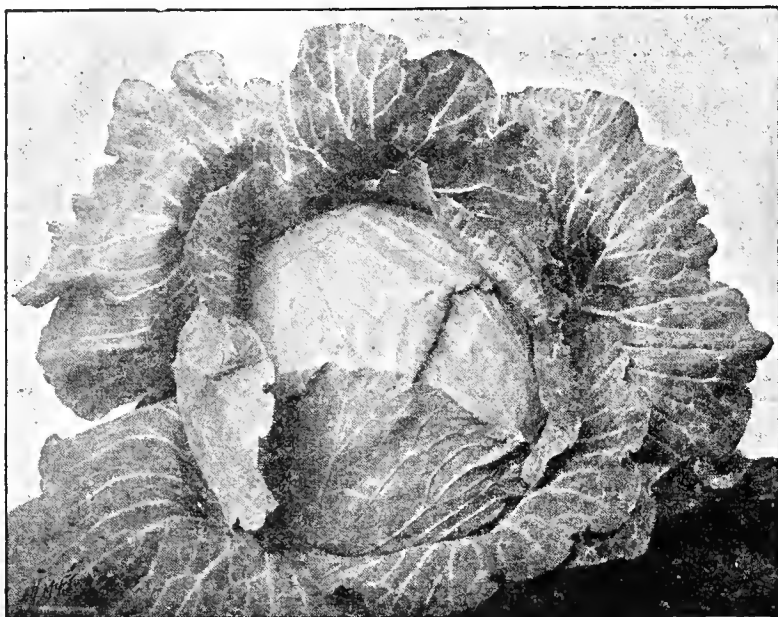
COLLARDS

Georgia, or Southern. Largely grown for "greens" in the southern states. Produces a large cluster of tender leaves at the top of its long stem. Sow late in the spring and give the plants plenty of room to develop. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

CRESS (For peppery salads and garnishes)

Fine-Curled Pepper Grass. Sow the seed any time from early spring on. It need not be grown in rows and requires no thinning. The leaves can be cut several times before the plants begin to form seed. Make sowings every week or ten days, a small patch at a time, for a continuous supply. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

Water Cress. (True.) Grows in damp places. Sow the seed in shallow water along the bank of a stream. No further care is required after sowing. Pkt. 15 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.



Copenhagen Market Cabbage

CABBAGE

Early Cabbage should be started under glass in January or early February, and transplanted as soon as the weather is suitable. The second crop should be started in March or April, and Winter Cabbage in May. Plants should stand 1½ to 2 feet apart, according to variety. Slug Shot will control the Cabbage worm. Cabbage requires rich soil, and the young plants can be pushed along rapidly with frequent small doses of Nitrate of Soda.

An ounce of seed will produce 1,500 to 2,000 plants

Copenhagen Market, Special Strain. ★ Far superior to the ordinary strain. A profitable variety for market-gardeners. Pkt. 15 cts., oz. 45 cts., ¼lb. \$1.25, lb. \$4.

Copenhagen Market. Matures in about 100 days from sowing. The heads are round, extremely solid, with small core and of excellent quality. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Copenhagen Market ("Yellows"-Resistant Strain). Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.15, lb. \$3.50.

Early Summer. Second-early Cabbage of the flat or drumhead type. Heads are of medium size and quite solid. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Glory of Enkhuizen. ★ The heads are solid and of fine quality. A good keeper. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Glory of Enkhuizen ("Yellows"-Resistant Strain). Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.15, lb. \$3.50.

Golden Acre. Earliness and fine quality make it a leader of the round-headed varieties. Pkt. 10 cts., oz. 35 cts., ¼lb. \$1, lb. \$3.

Hollander, or Short-Stem Danish Ballhead. ★ The heads are of only medium size but round, deep, and sound as a bullet. Good keeper. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Hollander ("Yellows"-Resistant Strain). Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.15, lb. \$3.50.

Penn State Ballhead. ★ (Originator's strain furnished in sealed packages.) A very superior Cabbage developed at Pennsylvania State College. The hard, tight heads weigh one-third more than ordinary heads of same size and are unusually good keepers. Matures in 130 days. Pkt. 15 cts., ½oz. 30 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

Premium Flat Dutch. A heavy yielder, producing large, heavy, flat heads which keep well until late in winter. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Select Early Jersey Wakefield. Matures its rather small, solid, pointed heads in 100 days from sowing. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Succession. A second-early drumhead variety which is a sure header under all conditions and at all seasons. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Red Cabbage

Danish Round Red. A superior strain with very hard, perfectly round heads in which the deep color extends clear to the center. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

Mammoth Rock Red. Heads flattened and very large. A reliable and popular Red Cabbage. Pkt. 10 cts., oz. 35 cts., ¼lb. \$1, lb. \$3.

Savoy Cabbage

The leaves are curled and crinkled, and the heads are firm and solid. They are best late in the season after a heavy frost.

Aire. Extra early, with fine curled leaves and pointed head. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

American Drumhead Savoy. Large, solid heads and few outer leaves. Pkt. 10 cts., oz. 35 cts., ¼lb. 90 cts., lb. \$2.50.

Chinese or Celery Cabbage

Pe-Tsai. Produces heads about 18 inches high and 4 inches or more in diameter. Sow the seed the last of June or early in July, in shallow drills about 2 feet apart, and thin or transplant the seedlings to stand about 15 inches apart. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1.15, lb. \$3.50.

FROSTPROOF CABBAGE PLANTS

These can be planted in the open ground a month to six weeks sooner than home-grown plants, and will stand a temperature of 20 degrees above zero without injury. We can furnish Early Jersey Wakefield, Copenhagen Market, Succession, and Early Flat Dutch and fill orders from December 1 to May 15. Plants are shipped direct from growing station in the South. Specify shipping date on your order.

100 plants 50 cts., 500 plants \$1.60, 1,000 or more, \$3 per 1,000, postpaid.

BY EXPRESS, BUYER PAYING EXPRESS CHARGES: 1,000 to 5,000 plants, \$2 per 1,000; 5,000 or more, \$1.50 per 1,000.

CAULIFLOWER

Sow the seed and treat the young plants exactly as you would cabbage, starting the spring crop in flats indoors or in the hotbed early in February and transplanting to the garden in May after danger from frost is past. Sow for fall crop in coldframe or seed-bed in May and transplant in July. Set the plants 1½ feet apart, digging in plenty of manure if it is available. When the plants show signs of heading, water them freely. Finally, when the heads are about 2 inches in diameter, tie the outer leaves loosely together over the top with a soft twine, to protect them from the sun and blanch them white.

An ounce of seed will produce about 2,000 plants

Danish Giant, or Dry Weather. A little later than Snowball and the plants are larger. Preferred in some sections because it will grow and head during dry weather. Pkt. 40 cts., ¼oz. 75 cts., oz. \$2.50, ¼lb. \$8.

Select Early Snowball. ★ Extra-early and one of the surest headers. It produces deep, solid heads of medium size, pure white, and of fine quality. Being compact in growth, the plants can be set close together. Forces easily and is often grown in greenhouse or frames. Pkt. 40 cts., ¼oz. 75 cts., oz. \$2.50, ¼lb. \$8.

Snowdrift. ★ Somewhat more vigorous than Snowball and selected to produce a larger head without losing materially in earliness. Harvesting may be completed 120 days after date of sowing. The pure white heads are remarkable for their great depth and unexcelled white color, and the curd is of fine texture, resistant in a high measure to "riciness" and "fuzziness." Heads in which small green leaves appear will be sought in vain and the inner leaves perfectly protect the head until nearly full grown. Pkt. 40 cts., ¼oz. 90 cts., oz. \$3, ¼lb. \$10.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

CARROTS

Carrots succeed in any good garden soil; freshly manured ground will produce split and misshapen roots. Sow the seed any time after the frost is out of the ground, covering it about an inch deep and pressing down firmly. Thin the seedlings to 2 inches apart until they begin to reach edible size, when they should be again thinned, this time to 4 inches. The thinnings will be found to be especially good eating. Make sowings every 3 to 4 weeks from late March to the end of June. Carrots for winter storage should be sown in early June.

*An ounce of seed will sow about 100 feet of drill;
3 to 4 pounds are required to sow an acre*

Chantenay. ★ The roots are broad at the top, tapering to an abrupt point. It produces heavy yields on comparatively shallow soils. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Danvers Half-Long. ★ The roots are smooth, nearly cylindrical, bluntly pointed, and in good soil will attain a length of 6 to 8 inches. The skin and flesh are bright orange-red, fine-grained and tender. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Early Scarlet Horn, Blunt Root. A quick-growing variety which makes thick, blunt-ended roots about 3 inches long, deep orange in color. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

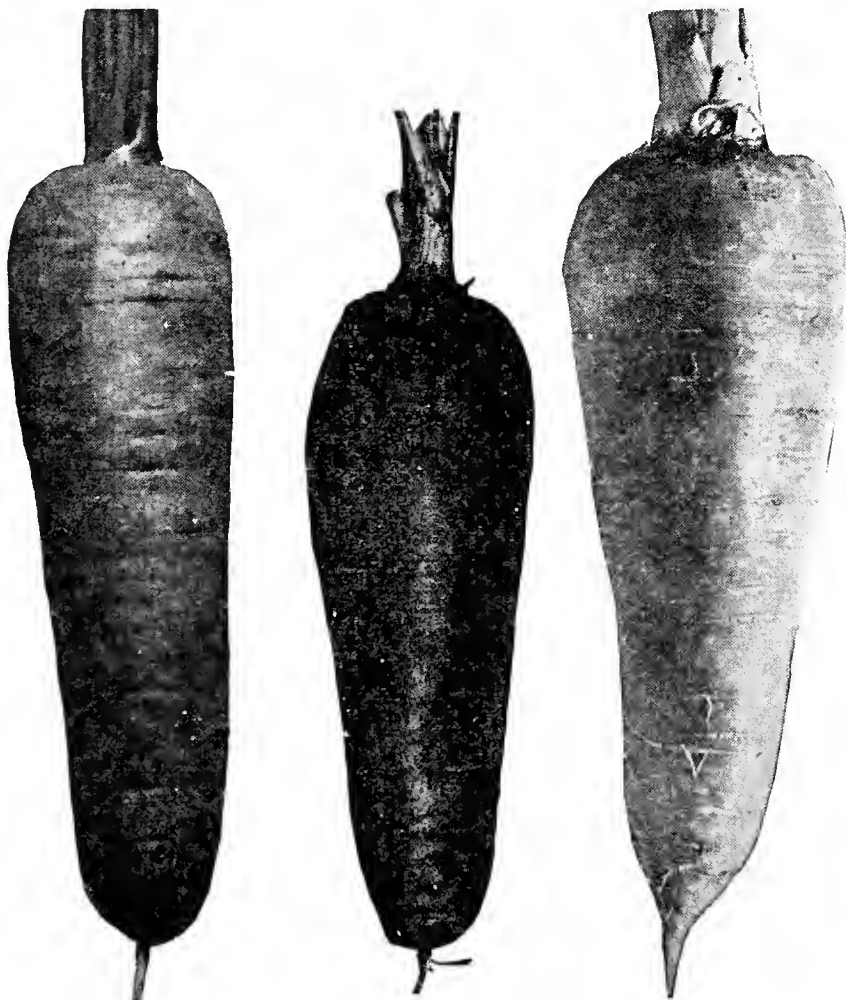
Improved Long Orange. Large, tapering roots, 12 to 14 inches long, smooth, bright orange in color and of good quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Morse's Bunching. Matures in 80 days. Roots rich even reddish orange, small core; 8 inches long, sweet, tender; short, strong tops. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Red-Cored Chantenay. A rich orange color, decidedly deeper than the ordinary Chantenay. Roots are uniform in size and appearance, and a little earlier in maturity than ordinary Chantenay. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

St. Valery. A tapering Carrot of fine quality, about 10 inches long, deep reddish orange in color. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Supreme Half-Long. Cylindrical roots 6 to 7 inches long, rich deep orange, with uniformly small orange-red core. Tops short but sturdy. Recommended for shipping, or for the home or market garden. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.



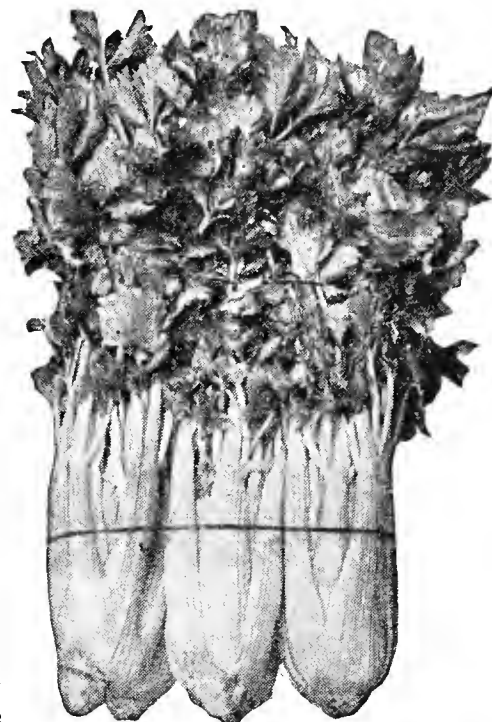
Chantenay

Early Scarlet Horn

Danvers Half-Long

CELERY

Celery wants plenty of fertilizer—enrich the spot where you are going to grow it with manure, humus, or rich compost, or if you lack these, with a commercial fertilizer high in nitrogen. For early crops sow indoors or in a hot-bed about March 1, barely covering the seed with soil. When the seedlings are 2 to 3 inches high, thin out or transplant $1\frac{1}{2}$ to 2 inches apart. Set out by the end of May. For winter Celery, sow seed in a coldframe or sheltered spot in the garden about mid-April and reset in the trenches about July 1. It is a good plan to cut off the tops of the plants when they are 4 or 5 inches high to make them more stocky.



Golden Plume Celery

*An ounce of seed will produce 3,000 plants;
one-half pound is required for an acre*

Easy Blanching. ★ The stalks are of medium height, thick through, and brittle; the heart is heavy, blanching quickly to a clear light yellow. Less liable to blight than other sorts, and good for both early and late crop. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Fordhook. Stalks smooth, entirely free from stringy fibers, and $1\frac{1}{2}$ inches through when cut. Blanches pure white but heart has a tinge of light, buttery yellow. Crisp, nutty flavor. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Giant Pascal. ★ A fine, late Celery with broad, thick, heavy stalks of superb nutty flavor; blanches yellowish white. A good winter keeper, retaining its flavor and crispness in storage. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Golden Phenomenal. Grows 27 to 28 inches over all, and from 8 to 9 inches to the joint. Plants are heavy, compact, and full-hearted. The stems are broad and thick, brittle and free from strings, of fine flavor, and of excellent quality all through. Pkt. 15 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Golden Plume or Wonderful. ★ Resembles Golden Self-blanching in crispness and flavor, but much larger and ranker in growth, blanches quicker and matures earlier. It is also more blight-resistant than Golden Self-blanching. Pkt. 15 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Golden Self-Blanching. It is rather low and compact in growth, with thick, round stalks and heavy heart, blanching easily to a rich golden yellow. In flavor and quality it is unsurpassed. A favorite for early market. Pkt. 10 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

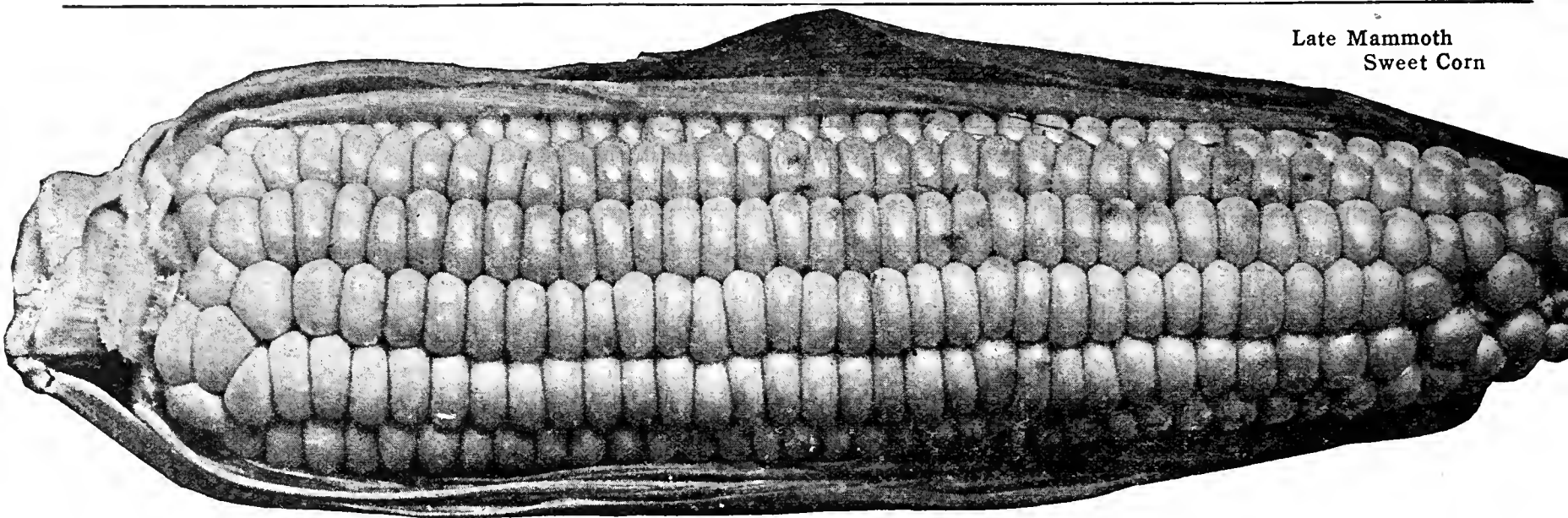
White Plume. A very early, easily grown variety with tall, handsome stalks which blanch quickly to a silvery white. A favorite. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Winter Queen. Another late sort of strong, compact growth; solid and excels in keeping quality. Medium in height with thick, brittle stalks. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

CELERIAC or TURNIP-ROOTED CELERY

The roots—not the stalks—are the edible portion of this plant. They are used for flavoring soups and in stews, in place of Celery or celery seed, and are also cooked or used as a salad. Grown like Celery but does not require blanching.

Large Prague. A productive variety with large, round, smooth roots, free from side shoots. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Late Mammoth
Sweet Corn

SWEET CORN

Do not make the first sowing until the soil is warm and comparatively dry—the middle of May is usually the earliest it is safe to sow Corn in this section. Plant every 2 weeks until early July. It can be grown in hills or in rows. Hills are placed 2 to 3 feet apart each way, dropping about six seeds in each hill and, when the plants are about 8 inches high, pulling out all but the three or four strongest. Rows are spaced $2\frac{1}{2}$ to $3\frac{1}{2}$ feet apart and the plants thinned to stand 12 to 15 inches apart in the rows. In planting, cover the seed about 2 inches deep, or a little deeper if the weather is very dry. Growing Corn requires lots of water. In order that the ears may develop perfectly they must receive plenty of pollen from near-by stalks; consequently, it is always best to plant Sweet Corn in several short rows, side by side, rather than in one or two long rows. If you want to enjoy Sweet Corn far sweeter and richer than any you have ever been able to buy, grow it yourself and pick it just before it is to be cooked.

*One quart of seed will plant 200 to 300 hills or 300 feet of row;
6 to 8 quarts will plant an acre*

Early Varieties

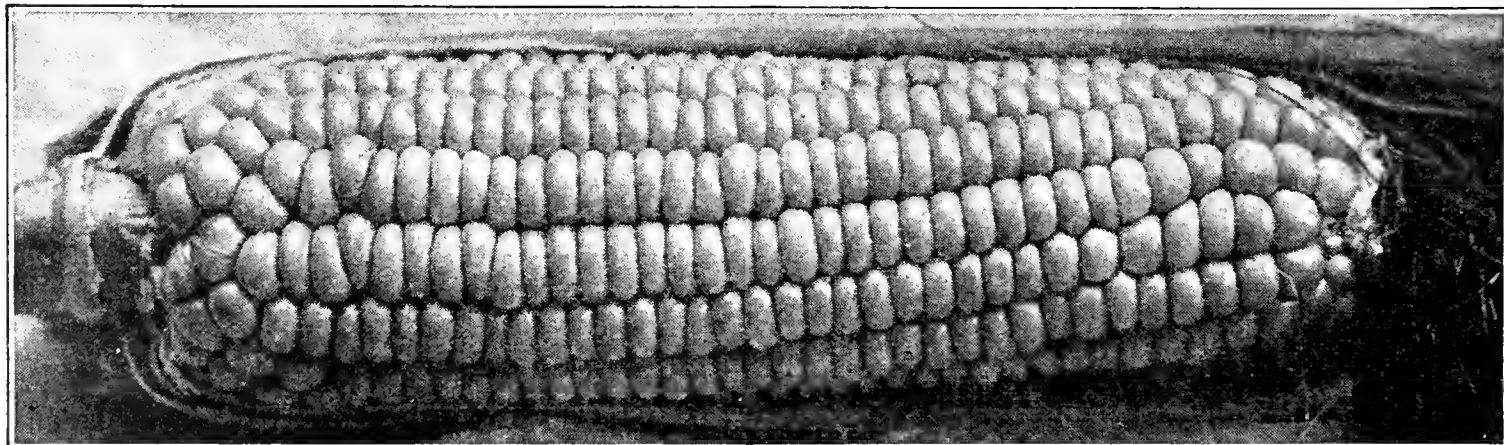
- Burbank's Bantam.** ★ The ear is 7 to 8 inches long, with 12 to 16 rows of delicious yellow kernels, and matures in 65 to 70 days. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.
- Early Mayflower.** Ears 7 inches long with 8 or 10 rows of broad, tender, pure white kernels. Fine for first early. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.
- Extra-Early Adams.** Not a true Sweet Corn but extremely hardy and early. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., pk. \$2, bus. \$6.
- Golden Alpha.** Ears cylindrical, 6 to 8 inches long, 8-rowed. Rich golden cream, of matchless flavor and quality. $\frac{1}{2}$ pt. 20 cts., qt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.

EARLY VARIETIES, continued

- Golden Bantam.** ★ Planted a week or so earlier than other sorts, it can always be depended on to supply the first true Sweet Corn of the season. Pkt. 10 cts., $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Golden Early Market.** It is about as early as Golden Sunshine, with 8- to 12-rowed ears 6 to 7 inches long. An outstanding early yellow variety. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Golden Sunshine.** An improvement on Golden Bantam in that the ears are an inch longer, 12-rowed instead of 8-rowed, and it matures about 10 days earlier. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$2.75, bus. \$9.

Medium Early Varieties

- Barden's Wonder Bantam.** ★ Large yellow deep grains. Ears a third larger than Golden Bantam, often 8 to 10 inches long. Early as Bantam and equal if not superior in quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Black Mexican.** The ears are of good size with broad kernels which are bluish white when they reach the edible stage and turn violet when cooked. Very sweet and tender. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Early Champion.** A medium-early white variety. Ears large, 14- or 16-rowed, well filled with large, broad grains of good quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Early Evergreen.** Not quite so tall but several days earlier than Stowell's, bearing large ears of typical Evergreen type and quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Early Mammoth.** ★ Coming in with Early Evergreen, it produces heavy ears 9 inches long with very broad grains of delicious quality. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Golden Giant.** ★ As sweet, tender, and rich in flavor as the famous Golden Bantam, practically as early, more productive, and much larger. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.



Golden Evergreen Sweet Corn

SWEET CORN, MEDIUM EARLY, continued

- Howling Mob.** ★ Medium-early; unusually large for so early a sort and not surpassed in quality by any other white Sweet Corn. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Kendel's Early Giant.** Medium-early, white sort with ears 8 to 9 inches long and 12-rowed, of good quality and very productive. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Scott's Early Perfection.** ★ As an early main-crop white Sweet Corn it has no superiors for either home or market use. Pkt. 10 cts., ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Whipple's Early White.** Matures about a week later than the small extra-early sorts. Ears 8 to 9 inches long with 16 or 18 rows of pearly white and sweet grains. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Whipple's Early Yellow.** ★ Ears about twice the size of Golden Bantam, 12- to 16-rowed, of very fine quality. Matures in about 85 days. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.

Late Varieties

- Country Gentleman.** Fine rich flavor. The ears are 7 to 8 inches long with long, narrow kernels set densely and irregularly on a very small cob. Often called "Shoe-Peg." Pkt. 10 cts., ½pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.
- Golden Colonel.** ★ Given award of merit in All-America Seed Selections for 1936. Like Country Gentleman except color, which is brilliant yellow. The only yellow Sweet Corn ripening with main-crop sorts. ½pt. 20 cts., pt. 35 cts., qt. 65 cts., pk. \$3, bus. \$10.
- Golden Cross Bantam.** ★ Ears 10- to 14-rowed and 7½ to 8 inches long. Ready in about 88 days. Highly resistant to Stewart's disease and very uniform in maturity. ½pt. 30 cts., pt. 45 cts., qt. 75 cts., pk. \$4.25, bus. \$15.
- Golden Evergreen.** ★ Fine, large-eared, deep-grained yellow Sweet Corn. A midseason Corn that remains tender and sweet for a long time after it reaches full size. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Golden Evergreen Hybrid.** Ears cylindrical, 14- to 16-rowed. Kernels golden yellow, medium wide and deep, sweet and of excellent quality. ½pt. 35 cts., pt. 65 cts., qt. \$1, pk. \$5.50.
- Late Mammoth.** ★ The largest of all Sweet Corns and one of the very finest in quality. Ears often 12 inches long, deliciously sweet. A week or ten days later than Evergreen. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- Stowell's Evergreen.** ★ The ears are 8 to 10 inches long with 16 to 18 rows of very deep, white sweet kernels. It remains tender and sweet for a long time. Pkt. 10 cts., ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.
- White Evergreen.** An exceptionally sturdy and productive strain of Stowell's, bearing a slightly larger ear and broader, whiter grain. ½pt. 20 cts., pt. 30 cts., qt. 55 cts., pk. \$2.50, bus. \$8.

POP-CORN

- Golden Queen.** Large golden yellow kernels. Pops pure white. Lb. 20 cts., 2 lbs. 35 cts.
- White Rice.** The most popular sort for general use. Productive; popping quality excellent. Prices shelled, lb. 20 cts., 2 lbs. 35 cts.

CARDOON

Grown somewhat like celery and served like asparagus. Large, fleshy plants used as a winter vegetable. The blanched stalks and ribs of the inner leaves are tender and of a fine flavor when cooked. Pkt. 10 cts., ½oz. 25 cts., oz. 40 cts., ¼lb. \$1.25, lb. \$4.

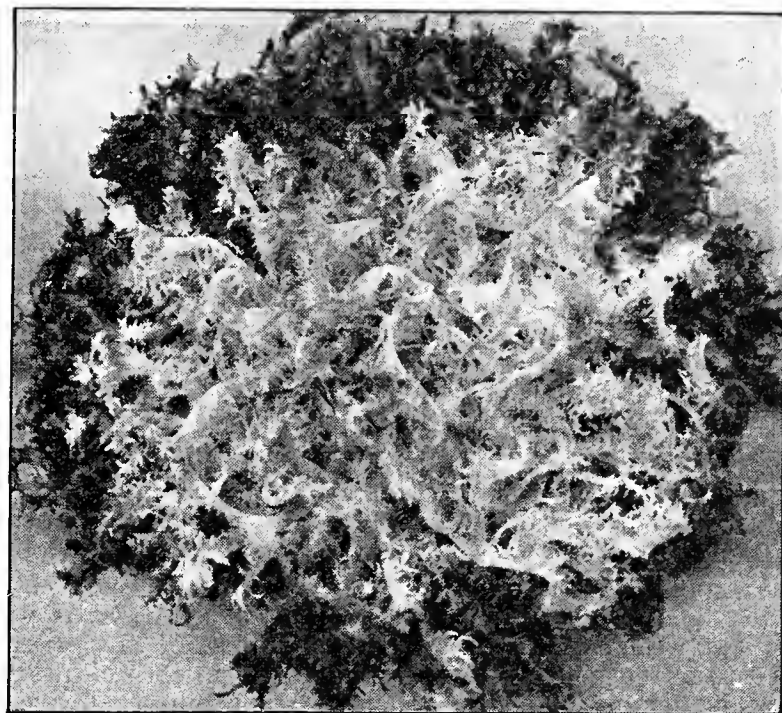
CORN SALAD

A hardy, quick-growing plant, popular as a substitute for lettuce in late fall and early winter. Sow the seed early in the fall in shallow drills, and give plenty of water. Late plants, covered with a light mulch of straw or leaves, will be suitable for use in early spring.

An ounce of seed sows about 100 feet of drill

Large-Seeded. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.25.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES



Green Curled Endive

ENDIVE

Sow the seed any time from early April to the end of July. Plant in shallow drills, about 15 inches apart, and thin the plants to stand 10 to 12 inches apart in the rows. When full grown, tie the tips of the outer leaves together over the center of the plant (when the leaves are dry), to blanch the heart, which will take about a week's time.

An ounce of seed will sow 150 feet of row; 3 pounds will sow an acre

Batavian Fullheart. ★ An earlier improved strain of Broad-leaved, with larger leaf and broader, thicker head. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

Broad-Leaved (Escarolle). The leaves are broad and quite thick and heavy, slightly twisted and scalloped. Medium green in color, blanching readily, and of good quality. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

Green Curled. ★ The plants are large and handsome, with finely cut and fringed, dark green leaves. The heart blanches easily to clear white. Quality fine. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

Large Curled Pancalier. A vigorous grower with thick curled leaves and red ribs. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

White Curled. Foliage is a little finer than the Green Curled and the inner leaves become creamy white without blanching. Pkt. 10 cts., oz. 20 cts., ¼lb. 50 cts., lb. \$1.50.

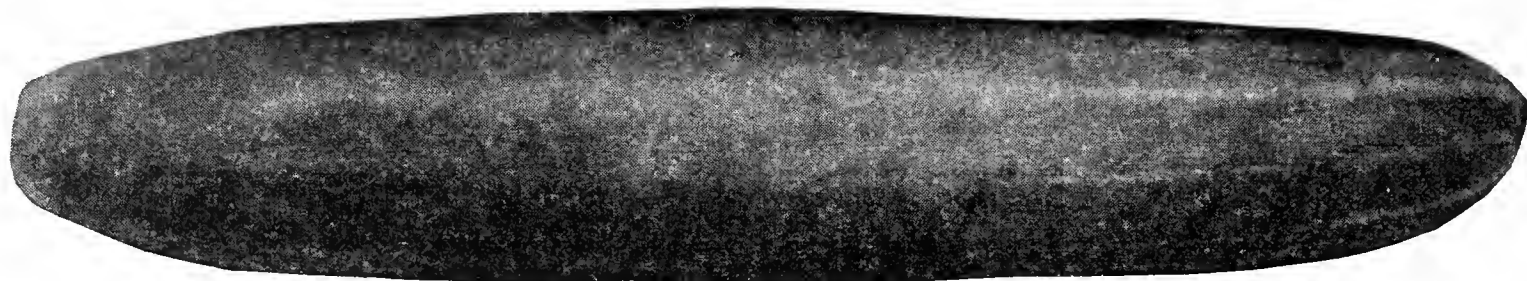
EGGPLANT

Start the seed in March, in hotbeds or boxes indoors. Push the seedlings along with plenty of light, heat, and moisture, and when they are about 3 inches high, transplant them to 3- or 4-inch paper pots or dirt-bands. Set out in the garden about June 1, spacing 2 to 2½ feet apart each way. Disturb the roots as little as possible in transplanting, and water freely.

An ounce of seed will produce about 1,000 plants

Black Beauty. ★ A week to ten days earlier than New York Spineless. Fruits are of enormous size, smooth, purplish black, and of fine quality. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.

New York Improved Spineless. Large, smooth, dark purple fruits of good quality, six to eight fruits to the plant. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.50, lb. \$5.



Longfellow Cucumber

CUCUMBERS

For an extra-early crop, start indoors or in a frame about April 1, sowing the seed in paper pots or dirt-bands or on the bottom of inverted sods, and transplant to the garden the latter part of May, moving sod and all in order to disturb the roots as little as possible. Sow the main crop directly in the garden late in May, and, for a continuous supply, make additional sowings every two weeks up to the middle or latter part of July. Prepare hills 4 to 6 feet apart, digging up the soil to a depth of a foot or more and mixing in plenty of manure or compost. Leave the soil in the hills loose and a little higher than the general level of the garden. Sow eight to ten seeds in each hill and thin out all but the strongest three or four plants. Do not disturb the vines after they have started to spread. If the striped beetles interfere with the development of the young plants, spray them with Pyrox or dust with Hammond's Rotenone Dust. See insecticide pages.

An ounce of seed will plant about fifty hills; 2 pounds of seed will be required for an acre

Black Diamond. The earliest White Spine Cucumber. Fruits dark green, 7 to 8 inches long, perfectly smooth, of handsome appearance. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Clark's Special. A very attractive, dark green Cucumber, uniform in length (8 to 10 inches), and smooth in appearance. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Cool and Crisp. Early. Fruits about 8 inches long, thick at the middle but tapering off at the ends; light green in color; quality good. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Davis Perfect. ★ A dependable producer of very long, slender fruits which are rich dark green color and of finest quality. It is a good shipper and holds its deep green color for a long time. Well adapted for greenhouse culture; medium early. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

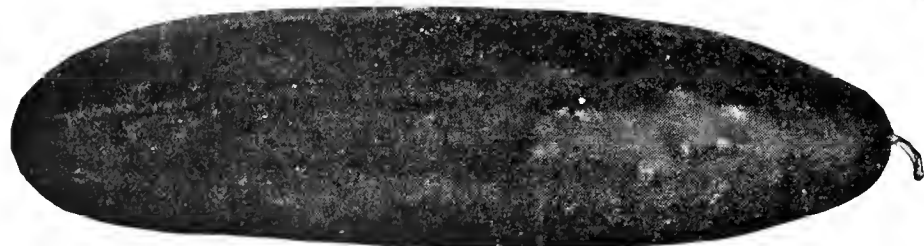
Early Fortune. Long, slender fruits, deep green in color and exceedingly uniform in size and shape, with crisp, firm flesh and few seeds. Early. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Extra-Long, or Evergreen White Spine. Fruits 10 to 12 inches long, dark green in color, smooth, and of splendid quality. Good for late crop and for greenhouse forcing. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Fordhook Famous. The fruits are of giant size, often 15 inches long, thick through and slightly tapered at the ends, dark green in color and with crisp, solid flesh and few seeds. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Improved Early White Spine. ★ Extra early and prolific. Produces medium-sized, light green fruits of fine quality for slicing or pickles. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Japanese Climbing. A good Cucumber for the small garden as the vines can be trained on fence or trellis; in fact, it requires some sort of support. Fruits long and thick, crisp, tender and of fine quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 65 cts., lb. \$2.



Davis Perfect Cucumber

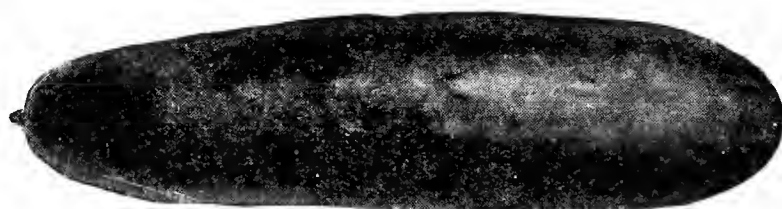
Kirby Staygreen. The earliest White Spine variety. Handsome fruits 7 to 8 inches long, of a beautiful dark green color. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Klondike. Medium-early. Unusual dark green color which it holds for a long time even under the hottest sun. Fruits of good size and shape. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Long Green Turkey. ★ Late but very productive. Fruits 12 to 14 inches long, straight and slender, slightly warted, dark green with crisp white flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Longfellow. ★ Late. Fruits 12 to 15 inches long, dark green, uniform, straight, and attractive, holds color and crispness well after being picked. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 55 cts., lb. \$1.50.

Straight 8. ★ The Cucumbers are straight, 8 to 10 inches long, smooth, and deep green in color. The flesh is crisp, white, and snappy. Seed-cavity small. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.



National Pickling Cucumber

Pickling Varieties

Everbearing. Small, very early variety used for early pickles. By keeping the fruits picked it will continue to bear throughout the growing season. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Extra-Long Jersey Pickling. ★ The fruits are slender and tapering, growing 6 inches long, medium green in color. Extremely prolific. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Green Prolific, or Boston Pickling. For small pickles. Produces short, thick, bright green fruits, smooth and symmetrical. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Heinz Pickle. A dependable plant that bears excellent crops of well-formed fruits when other varieties fail. The Cucumbers are blunt at both ends, deep russet-brown, and get large when mature. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

National Pickling. ★ Early, high-yielding variety especially bred for pickling in the small sizes. Fruits deep green, straight, symmetrical, blunt-ended, but not chunky. Pack without waste space. Make firm, crisp pickles. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 55 cts., lb. \$1.50.

West India Gherkin, or Bur. Used for pickles. The vines are luxuriant, bearing quantities of small, nearly round fruits, light green and covered with spines. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 65 cts., lb. \$2.

DANDELION

If the leaves are tied together, the center of the plant will blanch as white and clear as endive. Sow the seed early in shallow drills, in rich soil, and thin the plants to stand about 1 foot apart.

An ounce of seed will sow about 100 feet of drill

Improved French. Pkt. 20 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

HERBS

Grandmother's garden always had a little patch of herbs and, doubtless, much of the savoriness of grandmother's cooking as well as the effectiveness of her home remedies was derived from her store of "yarbs." Most of the commoner herbs are perennials, although they last but a few seasons in ordinary situations. Any odd corner will do, provided it is sunny and the soil not too hard or poor. Sow seed in early spring, thinning out as needed. The seeds of many herbs are slow and irregular in germinating.

Anise. Used principally for flavoring and for garnishing. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Balm. Used for making a medicinal tea. Pkt. 15 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50.

Basil, Sweet. A highly aromatic herb whose leaves and tops are used for seasonings and, in a limited way, in salads. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1.

Borage. An annual plant that is used freely by bee-keepers. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

Caraway. The seeds of this plant are used for culinary purposes, in confectionery and also in medicines. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Chives. Used as a substitute for onions in soups and salads. Pkt. 25 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts.

Chervil, Curled. Leaves of Chervil very much resemble those of parsley and are used in a similar way. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Coriander. An annual whose seeds are strongly aromatic. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Dill. An annual plant, seeds of which are used as a seasoning and also in the preparation of Dill pickles. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.

Fennel, Florence. A very delicious salad vegetable. It can be served like celery or boiled. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Fennel, Sweet. The leaves are finely cut and are used for garnishing. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Horehound. Chiefly used for medicinal purposes, as it has strong tonic properties. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.25.

Lavender. Dried flowers impart a pleasing odor to the contents of linen-chests. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1.

Marjoram, Sweet. Pleasingly fragrant and of particular value as a seasoning. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1.

Rue. A medicinal plant of extremely pungent taste. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50.

Saffron. Cultivated for medicinal purposes. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1.

Sage. An old familiar herb with a pungent odor. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.

Savory, Summer. Dried foliage used for flavoring during the winter months. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

Thyme. The leaves and young branches are used for seasoning. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50.

Wormwood. Has medicinal qualities. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1.



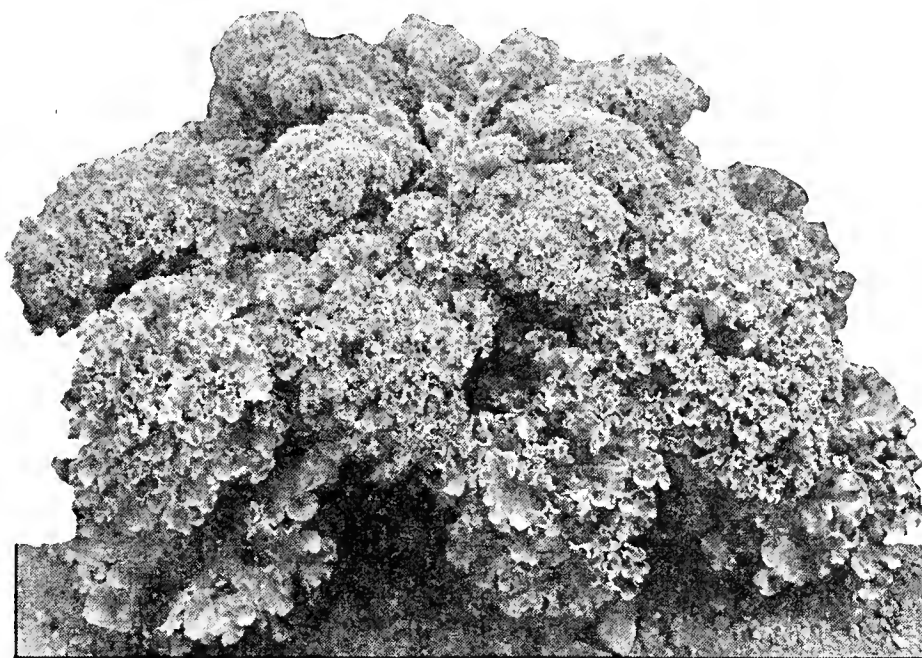
Sage



Sweet Marjoram

HORSE-RADISH ROOTS

Maliner Kren. The largest and most vigorous variety. Plant in early spring in rich, moist soil. Will produce a good crop in one season. Roots, 45 cts. per doz., \$2.25 per 100, \$15 per 1,000.



Dwarf Curled Scotch Kale

KALE (Borecole)

Makes delicious "greens" for fall and early spring use. For the fall crop, sow seed in May in shallow drills and thin or transplant to stand about 2 feet apart each way. Cultivate like cabbage. Light frosts will not injure Kale but will improve its flavor.

*An ounce will sow about 300 feet of drill;
4 pounds will sow an acre*

Dwarf Blue Scotch. ★ Dwarf, compact plants with finely curled bluish green leaves. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Dwarf Curled Scotch. ★ Extremely hardy and fine for early winter use. Grows 15 to 18 inches high and produces a heavy crop of beautifully curled, bright green leaves, tender and of fine flavor. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

Dwarf German. Low and compact in growth, with finely curled, yellowish green leaves. Nice for garnishing. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 90 cts.

Moss Curled. A more compact, curlier variety of Scotch Kale, making a handsome appearance in market and of high culinary quality. We recommend it. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Tall Curled Scotch. Like the dwarf form but grows about 2½ feet high. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.

KOHLRABI

Sometimes called Turnip-Rooted Cabbage. Sow the seed in shallow drills in April, or for extra-early crop start in the hotbed in March. Thin or transplant the plants about 6 inches apart. Kohlrabi grows rapidly and should be used when about half grown, 2 to 2½ inches in diameter. For a continuous supply make sowings every ten days up to the middle of July.

An ounce of seed will sow about 250 feet of drill

Early Large Purple. A little later and larger than the White Vienna, and a reliable sort. Skin purple; flesh white. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. 85 cts., lb. \$2.50.

Early White Vienna. ★ The quickest growing and most popular kind for table use. Leaves few and small; bulbs of medium size with white skin and flesh, tender and of delicate flavor. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. 85 cts., lb. \$2.50.

Large Green. Generally used for stock-feeding. Produces large bulbs with greenish white skin; rather tough when full grown but suitable for table use when small. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

LETTUCE

By starting seed for the first crop in the hotbed or in flats in the house in February or early March, and by carefully choosing varieties which will furnish a succession of crops in the garden, one may have fresh Lettuce for the table from May to November. Make the first sowing outdoors as soon as the ground can be put in shape, making the seed-bed as fine and mellow as possible. Scatter the seed in shallow furrows at least 15 inches apart, and cover lightly. As soon as the plants are big enough, thin them out to stand 3 to 4 inches apart. Then, when they begin to touch each other in the row, use alternate plants, leaving 8 to 12 inches, depending on variety, for the remainder to develop. Cultivate constantly.

Loose-leaved Varieties

Black-Seeded Simpson. ★ The plants are large, with broad, beautifully crumpled and frilled leaves, light green in color and of good quality. Stands more heat than others of its class. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Early Curled Simpson. Early, medium large, with yellowish green, crumpled and frilled leaves of excellent quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Golden Curled. A handsome, loose-heading Lettuce with greenish yellow, crinkled and frilled leaves. Medium size; crisp and tender. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Grand Rapids. ★ An extremely early variety good for first spring crop in the garden; also grown in greenhouses for winter market. The plants are large and handsome, with bright green, curled and crinkled leaves. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Ohio Grand Rapids. Like Grand Rapids except that the foliage is darker green, not so tender and will stand more abuse in handling. One of the best forcing varieties. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

Prizehead. A quick-growing sort with broad, crumpled, frilled, green leaves, tinged red on outside; crisp and sweet. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

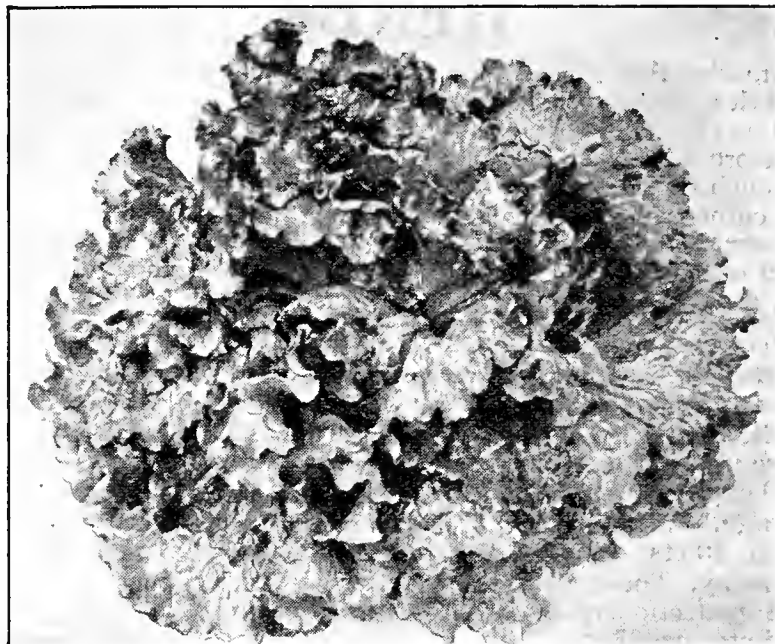
Heading Varieties

Big Boston. ★ Large, compact heads of rich buttery quality, but will not ordinarily "head up" for the home-gardener unless it is started indoors or sown very early so as to mature before warm weather. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Black-Seeded Big Boston. Similar to Big Boston, but a little coarser in growth and stands longer before going to seed. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.



New York or Wonderful Lettuce



Black-seeded Simpson Lettuce

HEADING VARIETIES, continued

Brown Dutch. Very hardy. Head medium large, moderately firm, dark green, overlaid with bronze-red, yellowish inside, and of good quality. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

Crisp-As-Ice. Makes a solid head of medium size. Unusually hardy, it is desirable for fall sowing. The outer leaves are dark bronzy green, crumpled and heavy in texture; inner leaves creamy yellow, crisp and sweet. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Iceberg. Outer leaves light green, tinged with brown at the edges; inner leaves white, crisp, firm and sweet. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Improved Hanson. ★ The plants are of good size; outer leaves medium green, somewhat crinkled; inner leaves blanched white. A dependable summer Lettuce. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.25.

Large Summer Cabbage. The heads are large, quite solid, medium green in color, blanching to creamy yellow in the heart, and of fine quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

May King. An early Butterhead Lettuce of superb quality, and an ideal sort for early spring planting. Solid heads of medium size, with light green outer leaves and rich golden yellow hearts. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

New York, or Wonderful. ★ It grows slowly but makes a fine heavy head and remains in prime condition for several weeks. The outer leaves are dark green; the inner blanch to creamy white. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

White Boston. ★ Head of medium size and compact, with creamy yellow heart. Excellent quality. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

White Paris Cos, or Romaine. Cos Lettuce can be grown in the hottest weather and, when properly blanched, it is crisp, tender, and of excellent flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

LEEK

Sow the seed in shallow drills early in the spring and when the plants are about 5 inches high, transplant them 6 to 8 inches apart in rows, and cultivate frequently. At the time of transplanting it is a good plan to cut back the plants about a third of their height. The stalks are best when blanched by drawing earth up around them.

An ounce of seed will sow 150 feet of row; 4 pounds will produce sufficient plants for an acre

Large London Flag. The hardiest and most generally cultivated variety. Broad stalks of strong flavor. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Musselburg. Grows larger and is milder in flavor than the preceding. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

MUSKMELON or Cantaloupe

Melons grow best in a light, warm, well-enriched soil. Since they cannot be sown outdoors until warm weather, and require a long growing season, it is a good plan, in this part of the country, to start the seed in a hotbed or box indoors, using inverted sods or dirt-bands, as recommended for early cucumbers. Plant them in the garden, in hills 5 to 6 feet apart, digging the soil to a depth of a foot and mixing in plenty of manure or fertilizer with the bottom soil. No more than three or four strong plants should be left in each hill.

*An ounce of seed will plant about 50 hills;
2 to 3 pounds will plant an acre*

Emerald Gem. ★ An early, prolific melon. The fruits are small, decidedly flattened and deeply ribbed; the skin is dark green and the flesh is unusually deep and solid, bright orange in color clear to the rind, and of remarkably fine quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Extra-Early Hackensack. A large, round melon, slightly flattened at the ends. The skin is ribbed and netted; the flesh is thick, light green in color, and of good quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Honey Dew. The fruits are very large, with thin, hard, smooth, pale green rind and thick green flesh which remains firm and crisp for a long time. Requires a long growing season. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.

Imperial. ★ Netted yellow fruit with orange flesh. A fine cropper, even in hot, dry seasons. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Osage, or Miller's Cream. The fruits are large, slightly elongated, with lightly netted dark green skin and thick, firm, orange flesh of fine flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Rocky Ford. The fruits are medium small, oval in shape, slightly ribbed and covered with a coarse, gray netting. Flesh green and remarkably sweet. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Tip-Top. ★ Probably the most dependable melon for this region. Medium early and productive, bearing large, round, ribbed and netted fruits with thick, sweet, orange flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

WATERMELON

In general, Watermelons require the same treatment as muskmelons. Start the plants in a hotbed, if possible, to save time, for they require a long growing season. It is not safe to sow seed outdoors until the last of May. Prepare the hills carefully, spacing them 8 to 10 feet apart and digging them deep, mixing in each a couple of shovelfuls of manure or a little commercial fertilizer. To protect the seedlings as much as possible, sprinkle them with arsenate of lead powder or tobacco dust. Water freely in dry spells.

An ounce will plant about 20 hills; 4 pounds will plant an acre

Kleckley Sweets. The fruits grow about 20 inches long and 10 inches in diameter, with thin green rind and bright scarlet flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Pride of Muscatine. ★ Wilt-resistant. Flesh light pink, sweet, and good. In size, general form, and color of the skin, it resembles Kleckley Sweets. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Sweetheart. ★ Large, heavy fruits, nearly round, with a thick, mottled light and dark green rind and firm red flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Tom Watson. Fruits 24 inches long and about 12 inches in diameter, with a thin, tough, mottled green rind and rich red flesh of good quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

GARDEN GUIDE

The most popular general garden handbook ever published.
576 pages, 300 illustrations. \$2.



Emerald Gem Muskmelons

CITRON

A form of melon used only for preserving, as the flesh is not edible when raw. Citrons are grown in the same way as watermelons; they are prolific and not so particular as to soil. Home-preserved Citron is much superior to that handled in the stores in a dried or candied form.

Green-Seeded. Also called "Colorado Preserving." Fruits large and oblong. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Red-Seeded. Flesh firm, with comparatively few seeds. Fruits round. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

MUSTARD

The young, tender leaves make piquant salads and are delicious as well as healthful as boiled "greens." Make frequent sowings during the spring months, commencing as soon as the ground can be prepared, in shallow drills 12 to 15 inches apart. Thin out to 10 inches between plants. Mustard can also be forced in frames or in the greenhouse during winter.

An ounce of seed will sow about 75 feet of drill

Fordhook Fancy. A dark green variety of robust growth, more curled on the edges than any other sort. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

Southern Giant Long Standing. ★ The plants grow 2 to 3 feet high, producing quantities of broad, succulent leaves which are handsomely curled and fringed. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

White Chinese. An improved form of the common White Mustard. Leaves broad and smooth, sweet and pungent in flavor. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

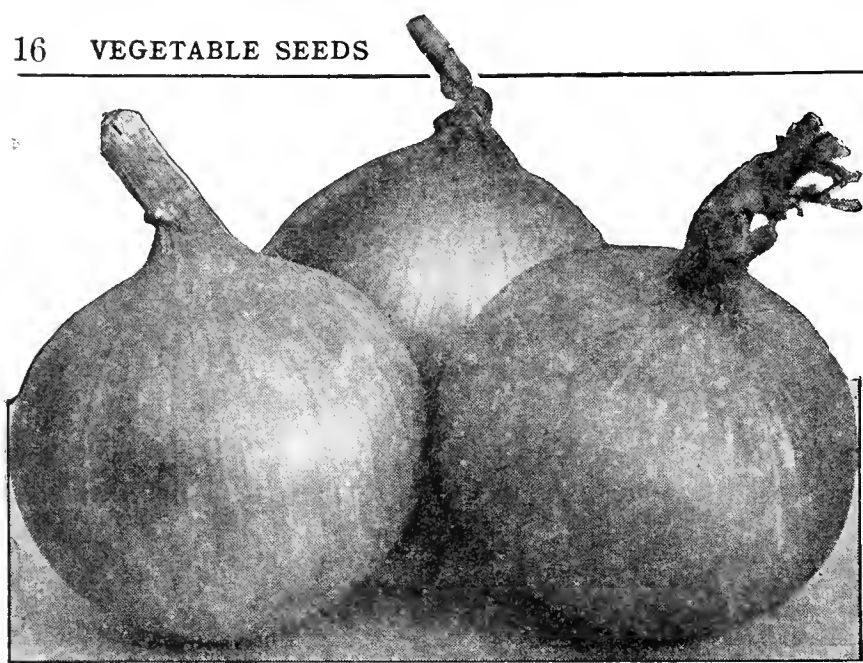
OKRA or GUMBO

Grown for its seed-pods, which are pickled when young, before they get tough, and used for flavoring and thickening soups. Sow late in May, in drills about an inch deep and 2½ feet apart and thin out to about 1 foot apart in the row. For an early crop, start seed in the hotbed late in March.

*One ounce will sow about 25 feet of row;
20 pounds will sow an acre*

Dwarf Prolific. Early and, as the name implies, low in growth and productive. Pods of medium size; light green. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

Long Green. ★ A tall-growing variety which bears quantities of deep green pods that average 4 to 5 inches in length at the edible stage. Slow to ripen. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.



Yellow Globe Danvers Onions

ONION

Small Onions from Seed. Easily grown from seed sown in fine, well-prepared soil early in the spring, the seed covered with a little fine soil pressed down firmly above it. When the seedlings are 3 to 4 inches high, thin them out to stand about 2 inches apart.

Large Onions from Seed. If possible sow seed in hotbeds early in February, thinning the seedlings enough to prevent crowding, and transplanting to the open ground early in May, spacing them 4 to 6 inches apart, depending on variety. If hotbeds are not available, sow the seed in the garden as early as the soil can be put in shape. Thin promptly.

*An ounce of seed will sow about 100 feet of row;
5 to 6 pounds will sow an acre*

Ailsa Craig. One of the largest Onions grown. Globular in form, with pale straw-colored skin and crisp white flesh, very mild in flavor. A heavy cropper and an excellent keeper. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Large Red Wethersfield. Similar in shape and color to Extra-Early Red, but larger and about two weeks later. Productive and an excellent keeper. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Prizetaker. ★ A fine selection of the giant Spanish Onion, which will, if planted early, produce bulbs 4 inches or more in diameter. It makes handsome, uniform, globe-shaped bulbs with thin, pale yellow skin and mild, sweet, white flesh. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Southport White Globe. ★ The largest and handsomest of the white Onions, also the best keeper. The bulbs are uniformly globe-shaped with pure white skin and fine-grained, solid flesh of sweet, mild flavor. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$2.75.

White Bunching. ★ A very quick-growing Onion of mild flavor, fine for early spring use. Good size; skin and flesh pure white. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

White Portugal, or Silverskin. Full-grown bulbs are large and flat; not a good keeper but extra-fine in quality. If grown for young pickling Onions, sow the seed at the rate of 25 pounds per acre. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Yellow Danvers Flat. Flat bulbs of good size, with thin necks ripening down hard and keeping well. Skin is straw-yellow; flesh white, fine grained and mild. Medium early. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Yellow Dutch, or Strasburg. Early; medium size and flat in shape; quality good. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

Yellow Globe Danvers. ★ Productive and medium early; bulbs large, solid, nearly globe-shaped, with yellowish brown skin and pure white flesh, crisp, sweet, and mild in flavor. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. 90 cts., lb. \$2.50.

ONION SETS

By starting with sets, small green Onions can be produced very early and large Onions can be harvested about August 1. Plant sets as soon as the ground is ready; push them into the soil but do not cover them over, allowing 2 to 4 inches of space between, depending on whether small or large Onions are wanted.

Yellow. Qt. 15 cts., pk. \$1, bus. \$3.

White. Qt. 20 cts., pk. \$1.10, bus. \$3.25.

Potato Onion Sets. Qt. 40 cts., pk. \$2.25.

Garlic Sets or Bulbs. Qt. 50 cts., pk. \$3.

} Ask for special
quotation on
large quantities

PARSLEY

Sow the seed as early in the spring as possible, half an inch deep. The seed is very slow to germinate, sometimes requiring six to eight weeks. Soaking it in lukewarm water for a few hours before sowing will help to hasten it. Thin to stand about 4 inches apart. Parsley beds may be carried over winter in a frame or by mulching with leaves or straw.

An ounce of seed will sow 150 feet of drill; 8 pounds will sow an acre

Champion Moss Curled. Can be cut the year round. Leaves attractively crimped and curled. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

Double-Curled. ★ Bright deep green curled and fringed leaves. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

Hamburg Turnip-Rooted. ★ Grown for its roots, which resemble short, thick parsnips and are highly flavored; useful in soups and stews. Grow like carrots. Can be stored for winter use. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

Paramount. A new and improved triple-curled variety. Unusually rich dark green foliage tightly curled. Ideally suited for home and market gardens. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

Plain or Single. ★ The leaves are deeply cut but not curled. Stronger flavor than the curled, and preferred for soups, etc. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

PARSNIP

Prepare the ground as early as it can be worked and sow the seed half an inch deep, and when the plants are well up thin to 6 inches apart. The roots mature in the fall and, being perfectly hardy, may be left in the ground all winter, to be dug as needed. Their flavor is improved by freezing.

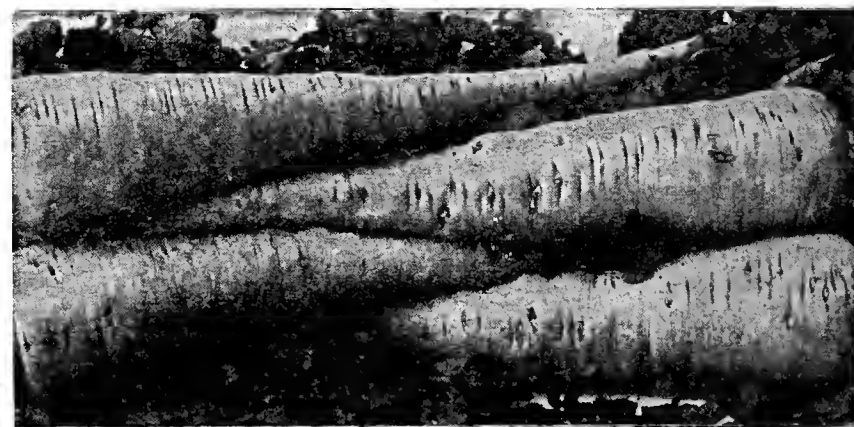
An ounce of seed will sow 150 feet of row; 8 pounds will sow an acre

Guernsey. Thicker at the top and not quite so long as some; consequently, a better variety to grow on shallow soils. Good quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

Hollow Crown. ★ Long, smooth roots with white skin and fine-grained flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

Maltese Half-Long. An early variety of particularly fine quality. Roots rather short and thick. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.

White Lisbon. The largest and most handsome variety. Fine quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 85 cts.



Hollow Crown Parsnips

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

PEPPER

Peppers require a moderately rich and light soil, a long growing season, and plenty of warmth at all stages. Grow them like egg-plants, starting the seed indoors or in the hotbed in March, transplanting to pots or dirt-bands when the second or third leaf has developed, and resetting in the garden about June 1. Space the plants 2 to 2½ feet apart.

An ounce of seed will produce about 1,500 plants

Sweet Peppers

California Wonder. ★ Has thicker, firmer, heavier flesh than any other Pepper, and a deliciously sweet spicy flavor with no bite to it. Fruits are brilliant light crimson. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Chinese Giant. The largest of all Peppers, often measuring 5 inches in length and diameter. Late but productive; flesh thick and very mild and sweet; deep red when ripe. Pkt. 10 cts., oz. 65 cts., ¼lb. \$1.75, lb. \$6.

Golden Queen. The largest, most productive, and finest yellow-fruited Pepper. Very heavy, unusually meaty, and strictly mild. Glossy golden yellow skin. Pkt. 10 cts., oz. 65 cts., ¼lb. \$1.75, lb. \$6.

Harris' Early Giant. Large, early variety about 4 inches long by 3 inches through. It is deep green, turning to red, and of sweet, pleasant flavor. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Neapolitan. A solid, mild Pepper 4 inches long by 2 inches in diameter, and tapering irregularly from the shoulder. Glossy red when ripe. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Pimiento. A select strain of the famous Spanish Pepper, the thickest-fleshed and choicest quality variety in cultivation. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Ruby Giant. ★ Thick-fleshed and one of the largest of the early sweet Peppers. Deep green, changing to rich red when ripe. Handsome Pepper of fine quality. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Ruby King. Early and productive. Bright red, averaging 4 inches in length and 3 inches in diameter, tapering to a blunt point. The flesh is quite thick and sweet. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1, lb. \$3.

Squash or Tomato. Sweet as an apple; shaped like a tomato; 2 to 3 inches in diameter. Deep red. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Sweet Spanish. A large, rich scarlet Pepper of exceptionally mild flavor. Pkt. 10 cts., oz. 40 cts., ¼lb. \$1, lb. \$3.

World Beater. ★ Later but larger and a little more blocky in shape than Ruby King; flesh quite thick and sweet; bright scarlet when ripe. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Hot Peppers

Anaheim Chili. Late, hot variety for canning and drying. Fruits 6 to 8 inches long, 1 inch diameter. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Bull Nose. ★ Fruits vivid scarlet when mature; medium in size, square and blunt-pointed. Generally considered a sweet Pepper but the flesh is sometimes quite hot. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

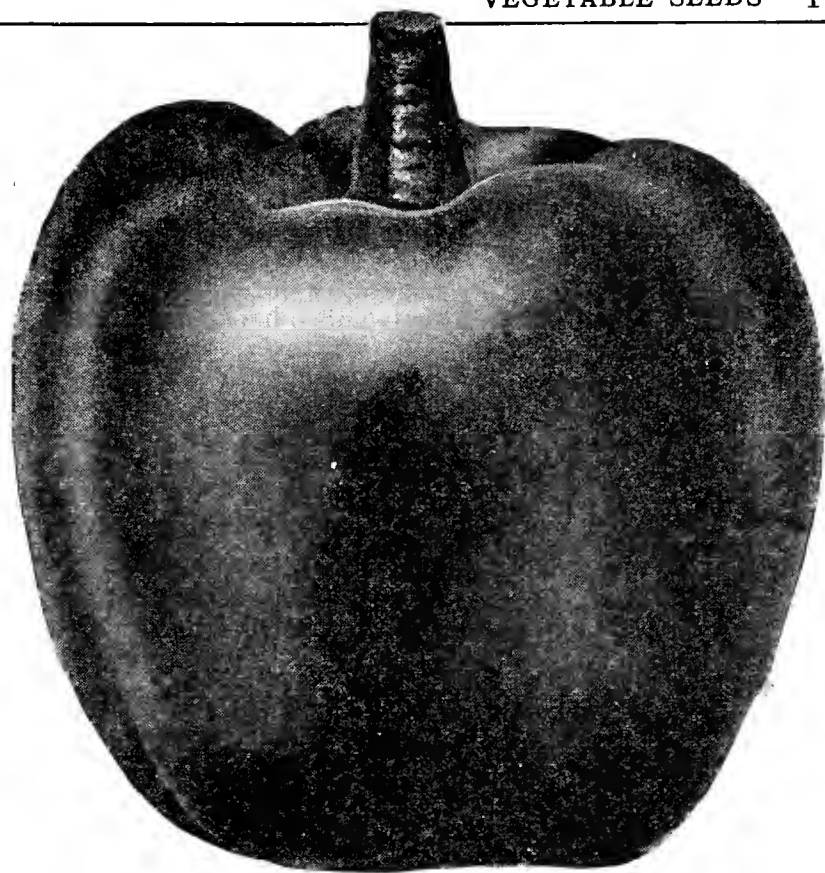
Hungarian Wax. ★ Fruits about 5 inches long and 1½ inches in diameter at stem end, tapering to a point. Waxy yellow and red when ripe. Hot. Pkt. 10 cts., oz. 65 cts., ¼lb. \$1.75, lb. \$6.

Large Red Cherry. Fruits erect, round or cherry-shape and very hot. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Long Red Cayenne. ★ Pods about 6 inches long, slender and pointed, bright scarlet; flesh very hot in taste and pungent in odor. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Small Red Cayenne. Bushy plants, loaded with little, slender pods, about 1½ inches long. Fiery hot. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.

Squash or Tomato, Hot. Like Squash or Tomato except that it has a much stronger flavor. Pkt. 10 cts., oz. 50 cts., ¼lb. \$1.25, lb. \$4.



California Wonder Pepper

PUMPKIN

The seed should be sown as soon as the ground gets warm, in hills 6 to 8 feet apart, dropping from four to eight seeds in each hill. Pinch back the vines after they get 4 to 5 feet long. Spray the vines with Nicotine Pyrox.

*One ounce of seed will plant about 25 hills;
4 to 5 pounds will plant an acre*

Table Varieties

Large Cheese. Big, flat, handsome Pumpkins with light buff skin and yellow flesh. Prolific. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Livingston Cushaw. Crookneck shape; skin mottled green and white; flesh yellow, fine-grained and sweet. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Mammoth Golden Cushaw. A large crookneck with golden orange skin and deep, rich yellow flesh of the very finest quality. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Small Sugar. ★ Small but productive and of splendid quality. Fruits round with bright orange skin and thick, sweet flesh. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Tennessee Sweet Potato. Sweet, tender, yellow flesh. One of the extra-good pie Pumpkins. Bell-shaped in form. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Winter Luxury. ★ Flesh golden russet color, of extra-fine flavor. Pumpkins medium size, with netted skin. Unusually fine sort. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Stock Feeding Varieties

Connecticut Field. ★ Very productive; fruits oblong, with bright yellow skin and rather coarse flesh. Usually grown for stock. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts., 5 lbs. \$3.50.

Kentucky Field. Fruits a little smaller and more round in shape than Mammoth Tours. Flesh of better quality and suitable for table as well as stock. Pkt. 10 cts., oz. 15 cts., ¼lb. 35 cts., lb. 85 cts., 5 lbs. \$3.50.

King of Mammoths. ★ Round, flattened at the ends, with golden orange skin and deep yellow flesh of fair quality. A good keeper. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.25.

Mammoth Tours. Fruits often weigh 100 pounds or more. Skin mottled green; flesh yellow, rather coarse. Used for stock-feeding. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.25.

GARDEN PEAS

Peas can be sown very early in the spring, the hardy round-seeded varieties even as early as March 1. For the first sowings use the smooth or round-seeded sorts, but after the first of April change to the wrinkled kinds which, although not so hardy, are much superior in quality. Make additional sowings every two weeks up to July 1 for a continuous supply all summer, but arrange to put the May and June plantings on deep, rich soil where you can conveniently water them during dry weather. The seed should be covered about 2 inches deep, or somewhat deeper in warm, dry weather. The dwarf varieties require no support, but the tall sorts should be provided with bush or wire to support the vines.

**INOCULATE THIS
SEED WITH
FARMOGERM**

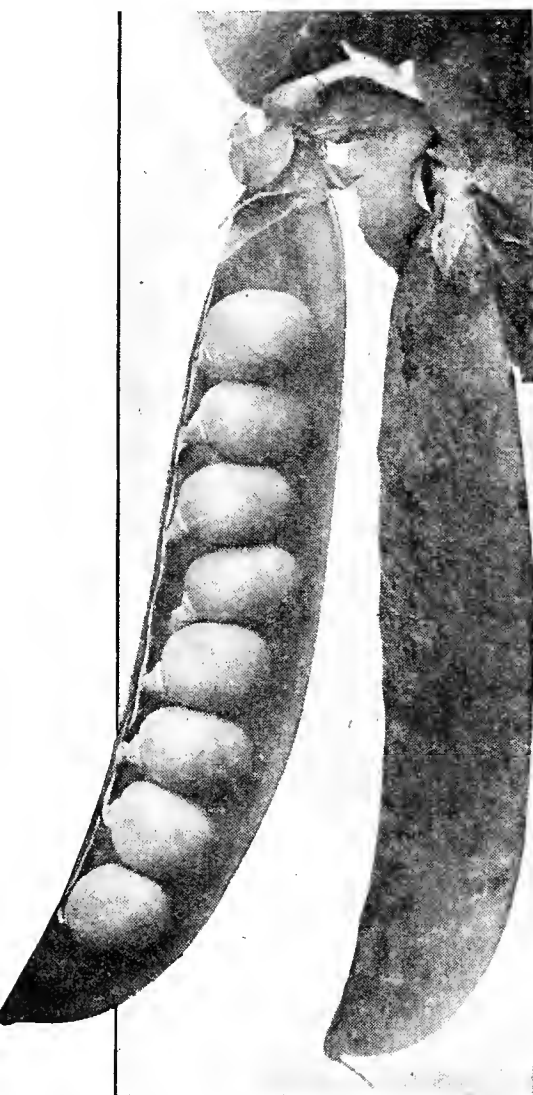
A quart of seed will sow 100 feet of single row; 1 to 1½ bushels will sow an acre

Hardy Round-seeded Peas

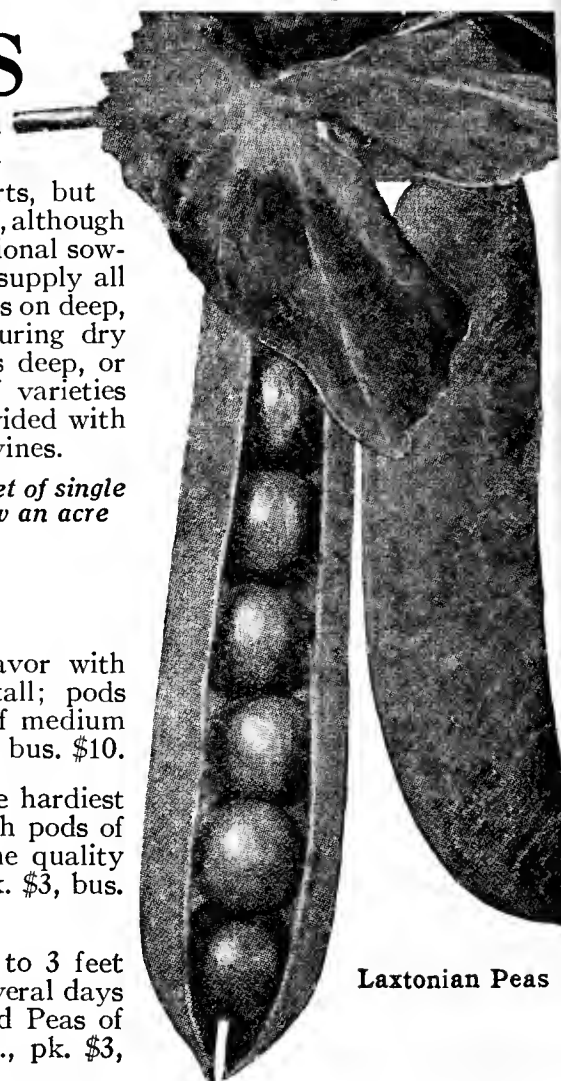
Alaska. A very productive smooth Pea, long in favor with market-gardeners and canners. About 2½ feet tall; pods rather small, ripening all at once; Peas small and of medium quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Carter's Eight Weeks. ★ The earliest and one of the hardiest Peas in cultivation. About 16 to 18 inches high with pods of good size for so early a sort. Peas large and of fine quality when young. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Market Surprise. An extra-early sort, growing 2½ to 3 feet tall. It is about the same season as Alaska, being several days later than Eight Weeks, but the pods are larger and Peas of better quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.



Potlatch Peas



Laxtonian Peas

Early Wrinkled Peas

Gradus, or Extra-Early Telephone. A grand old standby and a most dependable producer. Vines 3 feet high; pods about 4 inches long, broad and slightly curved, containing 7 to 9 Peas of excellent quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Laxtonian. ★ Of the same general type as Pioneer but a trifle taller and the pods and Peas are darker green. Quality of the best. Pkt. 10 cts., ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Laxton's Progress. ★ This dwarf, early sort comes in much earlier than Laxtonian. The Peas are deep green, of excellent flavor, fully wrinkled, and average 9 to 10 to the pod. Grows 18 inches high. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Little Marvel. ★ A very dwarf, large-podded variety which comes into bearing after Gradus. The vines grow about a foot high and bear big crops of 3¼-inch pods, containing large Peas of excellent flavor. Pkt. 10 cts., ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Nott's Excelsior. Same height and season as Little Marvel but the pods and Peas are smaller. Good quality and very prolific. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Pioneer. ★ One of the earliest of the wrinkled kinds. The vines grow about 16 inches tall, bearing very large, curved pods, medium green in color, filled with large Peas of fine quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

President Wilson. ★ A handsome, second-early, dwarf variety, with exceptionally large pods. Vines very dark green. Pods rich deep green, containing 8 to 9 large, succulent Peas. Excellent for home- and market-garden. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

NOTE: One pint of Peas weighs about 1 lb. and 1 quart about 2 lbs. One bushel of round-seeded varieties weighs 60 lbs. and 1 bus. wrinkled varieties weighs 56 lbs.

EARLY WRINKLED PEAS, continued

Thomas Laxton. As early as Gradus and grows to the same height. The pods are always crammed full of large, tender Peas of most superb quality. Desirable for the market-garden. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

World's Record. The earliest wrinkled Pea. It closely resembles the old standard Gradus, but is a few days earlier and the pods are a shade smaller. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Main-crop Varieties

Alderman. ★ Vines strong and vigorous; leaves and pods rich dark green; productive; quality the finest; matures with Telephone. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Dwarf Telephone. Also known as "Daisy." A little earlier than Potlatch, growing 2½ feet tall, with 4½-inch pods, containing 7 or 8 Peas of the very best quality. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Improved Telephone. Grows 4 feet high, with pods 4½ inches long, light green in color, and filled with 8 to 10 extra-large Peas. Bears several good pickings. Quality fine. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Mammoth-Podded Sugar. A tall, late, prolific variety which produces big, broad pods, so tender and sweet that the whole pod can be cooked and served like snap beans. If you have not grown sugar-pod Peas, be sure to try them this year. ½pt. 25 cts., pt. 40 cts., qt. 75 cts., pk. \$4.25, bus. \$15.

Potlatch. ★ Dwarf growth and extra-fine quality. Vines luxuriant, 2 feet high; pods deep green, 5 inches long and quite broad; Peas large and tender, often 10 to a pod. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

Prince Edward. Matures with Telephone; vines medium green, pods dark green in color. Highly recommended. ½pt. 20 cts., pt. 35 cts., qt. 60 cts., pk. \$3, bus. \$10.

RADISHES

An extra-early crop can be grown in the hotbed from seed sown in February or early March. Start outdoors as soon as the ground can be put in shape and sow seed of any of the quick-growing round or olive-shaped sorts, not too thick, in drills a half inch deep and 1 to 1½ feet apart. Thin out the seedlings promptly to stand about an inch apart in the rows. Keep them growing fast by hoeing or cultivating every two or three days, otherwise they become pithy and bitter. After putting in seed for the first crop, make additional sowings every ten days to two weeks, but for the later crops, which will ripen in warm weather, use the long varieties. For late summer and fall use, sow the Summer and Winter Radishes which are larger and slower growing but will, unlike the early round Radishes, thrive in hot weather. The Summer Radishes may be sown any time up to August 1. The big Winter Radishes should be sown late in June to attain full size before frost.

*One ounce of seed will sow about 100 feet of drill;
8 to 10 pounds will sow an acre*

Early Radishes

Cincinnati Market. ★ A popular home and market-garden variety. Roots long; skin rosy scarlet; flesh clear white, very brittle and mild. Popular for forcing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Crimson Giant. ★ The largest of the early, round Radishes, maturing in about four weeks from sowing. Handsome, deep red, globe-shaped roots. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

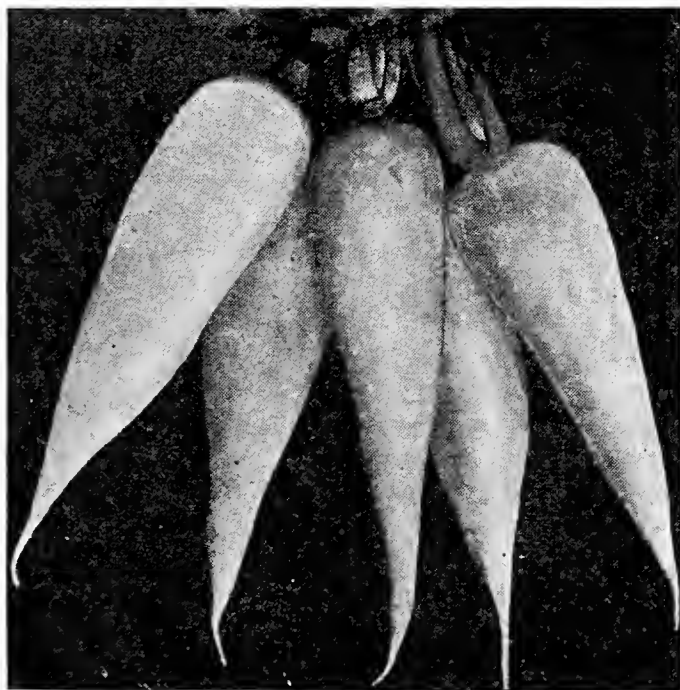
Early Scarlet Globe. ★ Matures medium-sized, elongated, globe-shaped, clear rosy scarlet roots in about four weeks from sowing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Early Scarlet Turnip. ★ Roots of medium size, round, smooth, bright red; tops small. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

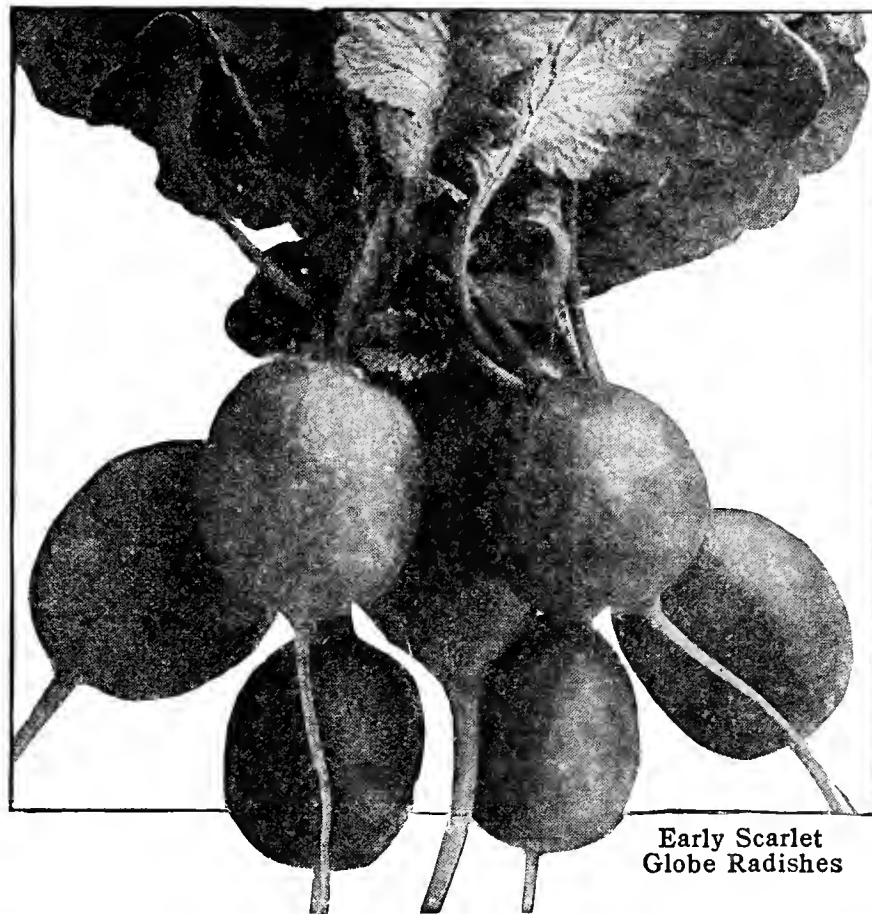
Early White-Tip Forcing. For forcing in frames or for early spring planting. Round, bright scarlet with clear white tip; small leaves. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

French Breakfast. An oblong or olive-shaped Radish of very fine quality. Early; bright carmine with clear white tip. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Icicle. ★ It grows quickly, making handsome, long, smooth roots with pure white skin and crisp, mild flesh. Reliable for either spring or summer use. Suitable also for forcing. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.



White Strasburg Radishes



Early Scarlet
Globe Radishes

EARLY RADISHES, continued

Non Plus Ultra. Ready for the table in 20 days from planting. Roots small, uniformly globe-shaped, and smooth, with brilliant scarlet skin and crisp white flesh. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Sparkler. Tops small; roots deep turnip, almost globe-shape, bright scarlet with pronounced white tip. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Summer Radishes

Chartier, Improved. Intermediate in season between the early and the Summer Radishes. Roots 7 to 8 inches long, bright rose with white tip. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

White Lady Finger. Resembles Icicle but grows more slowly and is particularly desirable for late sowings as it retains its fine, crisp quality for a long time even in the hottest weather. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

White Strasburg. ★ A long, oval Summer Radish of handsome appearance. Roots about 5 inches; skin and flesh pure white; remains firm and brittle longer than most sorts. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

White Stuttgart. ★ A large, late, pure white kind, with almost round or top-shaped roots 4 inches in diameter. Of good quality and a good keeper. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Winter Radishes

Celestial, or White Chinese. ★ Cylindrical in shape, often 8 inches long and 3 inches in diameter; skin and flesh pure white. Of fine quality and a good keeper. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

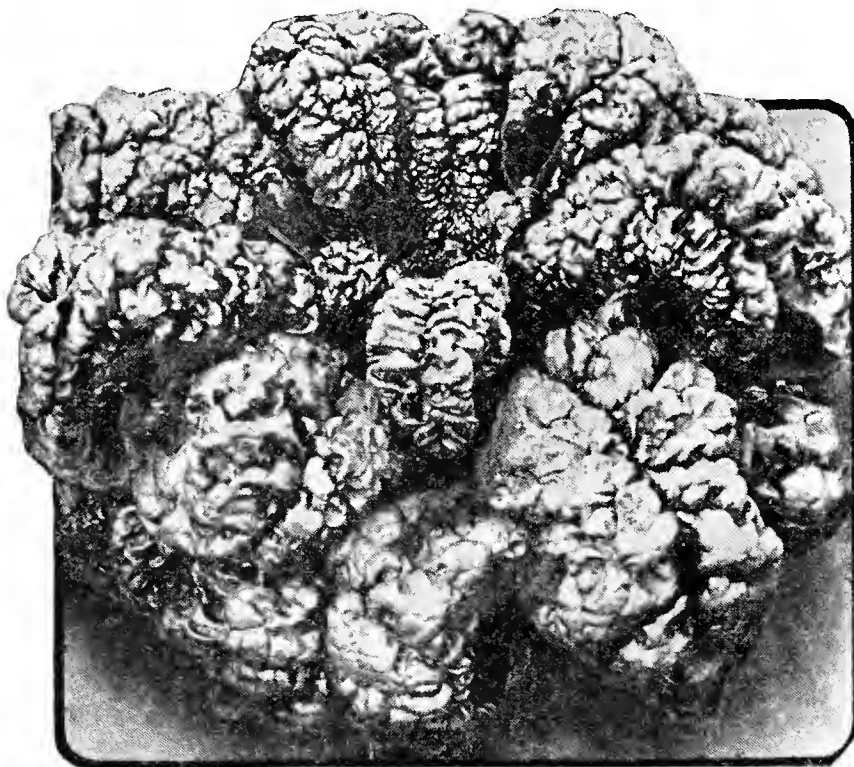
Chinese Rose. Roots 4 to 5 inches long, cylindrical, or larger near the bottom; skin smooth, bright rose in color; flesh white, crisp and tender. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Long Black Spanish. One of the hardiest and best keeping sorts. Roots 7 to 9 inches long and 2 to 3 inches in diameter at the top, tapering to an abrupt point. Skin black, flesh clear white and of fine quality. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Long White Spanish. Exactly like the preceding except in color of skin. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

Round Black Spanish. ★ Similar to the Long Black Spanish. Roots nearly round, 3 to 4 inches in diameter. Pkt. 10 cts., oz. 15 cts., ¼lb. 40 cts., lb. \$1.

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES



Summer Green Spinach

SPINACH

Start the first crop in drills an inch deep as soon as the ground can be made ready in the spring, and follow this with successive sowings every ten days up to the middle of May. Make additional sowings in August and September for fall use. Thin the plants to stand about 5 inches apart. To provide Spinach during hot weather, when ordinary varieties do not thrive, make a sowing of the heat-resistant New Zealand Spinach about May 1. For extra-early Spinach in the spring, sow one of the hardy sorts late in September and protect the plants over winter.

*One ounce of seed will sow about 100 feet of drill;
14 to 15 pounds will sow an acre*

Bloodsdale Savoy-Leaved. ★ (Reselected.) Very hardy and consequently most desirable for autumn and early spring use. The plants are upright and vigorous, with thick crumpled leaves. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

Bloodsdale (Long-Standing). ★ A very early, blight-resistant hardy sort that is much planted for market and canning. Leaves curled and wrinkled. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

Improved Large Round Thick-Leaved. A hardy, vigorous sort, particularly valuable to market-gardeners for early spring sowing. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

Juliana. ★ Grows close to the ground and has dark green, crumpled leaves that keep fresh-looking and retain their crispness a long time. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

King of Denmark. Stands a week or two longer before shooting to seed than any other sort. Leaves are thick, crumpled, and dark green. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

New Zealand. A distinct type of Spinach which makes large, bushy plants, often 3 feet in diameter. Only the young leaves and tips of the branches are used and the more they are picked, the faster the plant seems to grow. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 20 cts., lb. 50 cts., 5 lbs. \$2.25, 10 lbs. \$4.

Summer Green. ★ Stands in marketable condition a long time. Leaves intensely crumpled, blistered and very uniform, deep glossy green. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

SPINACH, continued

Triumph or Long Season. Leaves broad, somewhat crumpled, tender, and of fine flavor. For spring and early summer. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

Victoria. Leaves very large and thick, deep green in color, and of superior quality. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.65, 10 lbs. \$2.75, 25 lbs. \$5.50.

Virginia Savoy-Leaved, Blight-Resistant. This is a cool-weather variety that is resistant to "yellows" and mosaic disease, and has distinctly savoyed leaves. Matures in 35 days. Oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 45 cts., 5 lbs. \$1.90, 10 lbs. \$3.25, 25 lbs. \$6.75.

SWISS CHARD. See page 7

RHUBARB

It is cheapest to start with seed but only a percentage of the plants grown from seed will be worth saving. Sow early in the spring, in drills an inch deep and a foot apart, and thin the plants to stand about 5 inches apart. The following spring, reset the best plants 3 to 4 feet apart each way. If you start with roots, plant them with the crown about 1 inch below the surface. Give water, if needed, while the plants are producing and dress with manure every year after the cutting season is over.

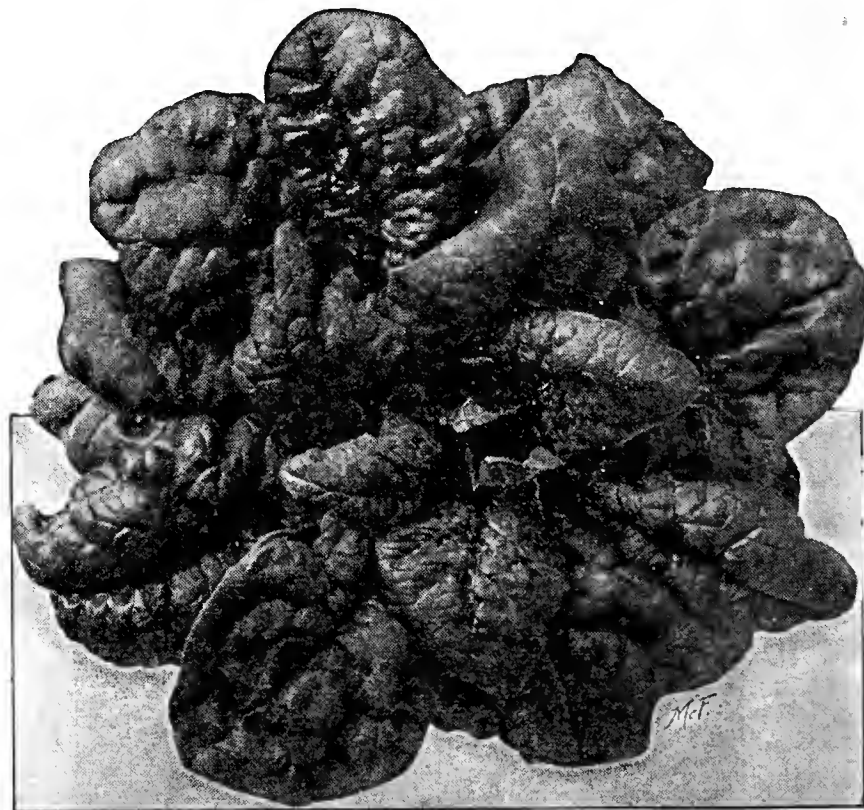
Victoria. This is the best all-round variety. Productive and comes fairly true from seed. Seed, pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts. **Roots,** 15 cts. each, \$1.50 per doz.; postpaid, \$1.75 per doz.

SALSIFY

Often called "Vegetable Oyster" or "Oyster Plant" on account of its flavor. Sow the seed early, as the plants require a long season to attain full size; cover about an inch deep and thin to 3 inches apart. Roots may be left in the ground all winter and dug as needed.

*One ounce of seed will sow about 50 feet of drill;
10 pounds will sow an acre*

Mammoth Sandwich Island. The best variety. Roots often 10 to 12 inches long, tender, and of delicious flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 65 cts., lb. \$2.



Bloodsdale Savoy-leaved Spinach

★ WHEN IN DOUBT, ORDER THE STAR VARIETIES

SQUASH

Sow the seed in hills, about 4 feet apart each way for the summer varieties and 10 to 12 feet for the late or winter sorts. Do not sow, however, until the soil is warm and dry. The Squash vine borer may cause some trouble during the season but can be discouraged by sprinkling tobacco dust close around the plants. Covering the vines with a little soil at several joints so that they take root there will also help to limit its destructiveness. The black Squash bug can best be kept in check by hand picking; spraying with calcium arsenate is the proper remedy for the striped beetle.

*One ounce of Squash seed will plant 15 to 20 hills;
3 to 5 pounds will plant an acre, according to variety*

Summer Squash

Black Zucchini. Cylindrical and of uniform thickness; rind dark green; flesh firm and of delicate flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Cocozelle (Italian Vegetable Marrow). Bushy plants, requiring little space, produce many oblong fruits averaging a foot long; green skin, mottled and striped with yellow and darker green. Quality extra-fine. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Fordhook. An excellent variety, suitable for both summer and winter use. The fruits are oblong, 8 to 10 inches long, with thin, light yellow skin and thick, straw-colored flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Mammoth White Bush. ★ One of the earliest. Compact in growth and prolific, with round, ivory-white fruits, with scalloped edges. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Yellow Summer Crookneck. Long, curved fruits with thin, golden yellow, warted skin; sweet, tender flesh. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Winter Squash

Acorn (Table Queen). ★ A small thin-skinned, greenish black Squash with dry, mealy flesh of wonderful flavor. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Boston Marrow. A productive late variety, shaped like the well-known Hubbard, with orange skin and thick flesh. A good keeper. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

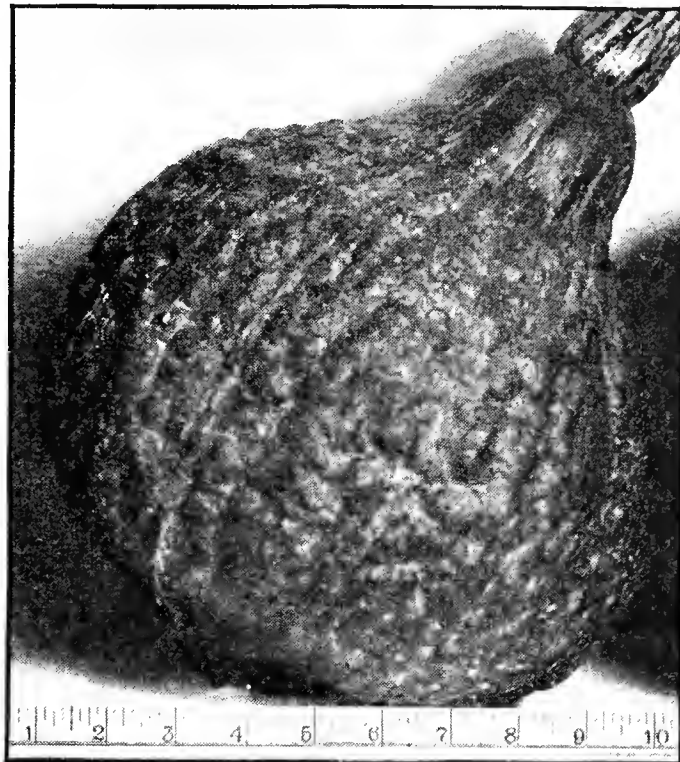
Golden Hubbard. ★ True Hubbard shape but earlier, a trifle smaller, and the skin is a rich orange-red in color. Flesh deep orange, dry and sweet; an excellent keeper. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Improved Hubbard. A selection from the old Hubbard, with more vigorous vine and slightly larger fruits. Skin smooth, dark green; flesh deep yellow and of superb quality. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.

Warted Hubbard. ★ The skin is heavily warted and very dark green, almost black, in color. The best keeper of the Hubbard type. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.25.



Mammoth White Bush Squash



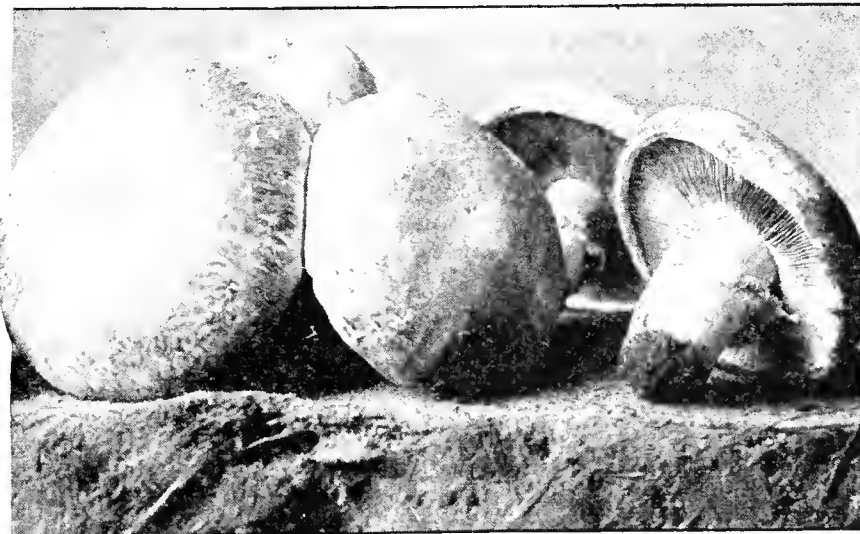
Golden Hubbard Squash

TOBACCO

For best results, Tobacco requires a rich, mellow soil and careful cultivation. Sow the seed in frames or a fine seed-bed early in April and reset the plants in the open ground late in May or early in June, spacing them 2 feet apart in rows 4 feet apart. Cultivate frequently.

Connecticut Seed-Leaf. One of the hardiest and most popular sorts. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts.

Havana. True type; productive and of finest quality. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts.

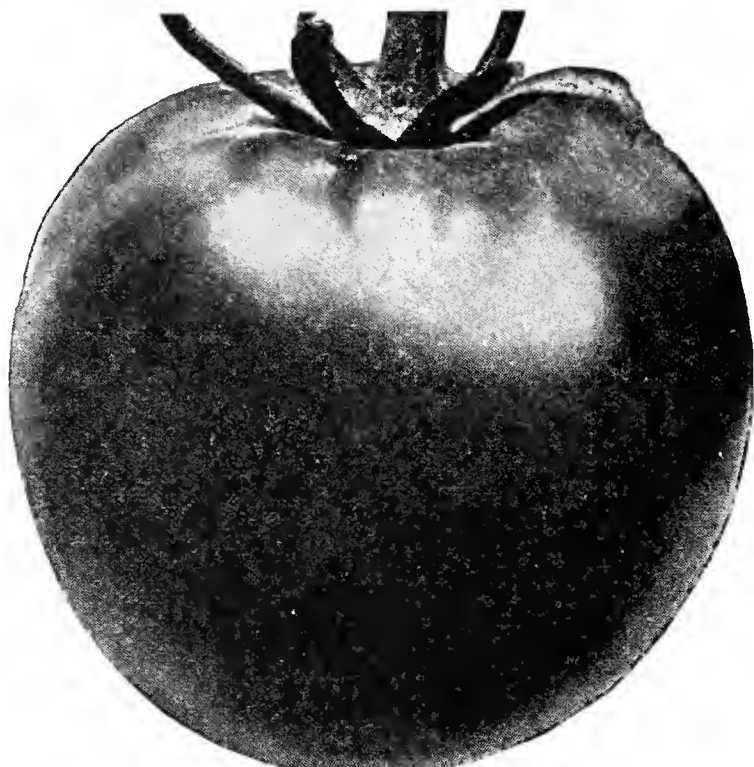


Mushrooms

MUSHROOMS

Anyone who has a cellar or dark room where the temperature can be kept at from 50 to 60 degrees, can grow Mushrooms of surpassing tenderness and flavor. We furnish special printed directions free with each order, or for 25 cents we will send, postpaid, an illustrated booklet on Mushroom culture which gives the latest improved methods of growing as well as full instructions for preparing for market and recipes for cooking.

Spore-Culture Mushroom Spawn, Northern-Grown. Pure and vigorous. In the form of compressed bricks, each of which will plant about 8 square feet of bed. Brick 30 cts., 10 bricks \$2.50, 50 bricks \$11, 100 bricks \$20.



Break O'Day Tomato

TOMATOES

The seed should be sown indoors in late February or March, in shallow boxes or pots placed in a warm, sunny window. As soon as the little plants are strong enough, thin or transplant them to stand 3 to 4 inches apart; then when they are about 3 inches high transfer them to small paper pots or dirt-bands. To secure extra-strong, stocky plants, transfer them again, when 6 to 8 inches tall, to larger pots. When all danger from frost is past, set them out in the garden, spacing them about 4 feet apart each way. To guard against blight, spray the plants with Bordeaux Mixture or Sulfocide two or three times during the season; arsenate of lead will kill the Tomato worms.

*An ounce of seed will produce about 2,000 plants;
4 ounces should give sufficient plants for an acre*

Early Varieties

Bonny Best. ★ To follow Earliana or John Baer. It is remarkably productive with large, round, smooth fruits in handsome clusters. Uniform in size and shape, solid, free from cracks, bright scarlet in color. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Break O'Day. ★ Fruits are of good size, smooth and the quality of fruit is exceptional compared to other early-maturing varieties. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Burbank. An early, scarlet-fruited variety. Fruits are small to medium in size, quite smooth but inclined a little to angularity. Pkt. 15 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Chalk's Early Jewel. An enormous producer. The fruits are a little larger than Bonny Best, slightly flattened in shape and bright scarlet in color, always solid, with hard, smooth skin. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Earliana, Spark's. This is the original Earliana Tomato. The plants are compact, with light foliage; the fruits are of good size, bright red, and quite solid. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Early Detroit. A pink-fruited Tomato. Fruits nearly round, firm, and of fine quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

John Baer. ★ Early. The fruits are of good size, perfectly smooth, and nearly globe-shaped, with brilliant scarlet skin and firm flesh, entirely free from core and with few seeds. The flavor is mild and deliciously sweet. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

EARLY TOMATOES, continued

June Pink. The best extra-early pink or purplish-colored Tomato, similar to Earliana in earliness and in most other respects except color. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Marhio. Fruit of a very attractive dark rosy pink. A vigorous grower, heavy cropper, wilt-resistant, free from cracks and excellent for fall forcing. Pkt. 15 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Penn State. An early Tomato with very compact plants. The beautiful rich scarlet Tomatoes are nearly globe-shaped, with dark red flesh and very few seeds. Pkt. 15 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

Pritchard. ★ Early. Fruits scarlet within and without, firm and meaty, with no core and practically no seed-pockets. Outstanding for its remarkable productivity. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Scarlet Dawn. A second- or medium-early sort. Very firm, brilliantly colored, globe-shaped fruits. Wilt- and rust-resistant. Pkt. 15 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Second-Early and Main-Crop Varieties

Beefsteak. ★ Late; purplish pink; vines strong and vigorous; very little seed; large, solid fruit. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

Buckeye State. A very large, dark purple Tomato. Late but a heavy cropper. Fruits nearly globe-shaped, always smooth and solid. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Dwarf Champion. Very dwarf and quite early; the fruits are of medium size, round and smooth with purplish pink skin. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Dwarf Stone. Bushy, compact plants, bearing solid bright red fruits. Medium early. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Greater Baltimore. A selection from Stone with all the good qualities of that fine old standby, but comes into bearing a little earlier. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Greater Marglobe. ★ As a result of extensive breeding work, this strain shows vast improvement over the original Marglobe in size and uniformity of fruits. We recommend it as the finest stock of this variety of Tomato. Pkt. 20 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$1, $\frac{1}{4}$ lb. \$3, lb. \$10.

Livingston's Globe. ★ Heavy crops of good-sized, uniform, distinctly globe-shaped fruits with smooth, glossy, purplish rose skin. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.



Rutgers Tomatoes

Second-Early and Main-Crop Tomatoes, continued

Marglobe. ★ The fruits are of medium size, smooth, solid, and deep from stem to blossom end, with an irregular cell structure. In clusters of five to seven. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Matchless. A main-crop Tomato with bright red, solid fruits of excellent quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Oxheart. A main-crop, pink-fruited variety. Fruits are large, bulging, heavy and solid. In clusters of three to seven. Pkt. 15 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

Ponderosa. ★ Enormous fruits, which weigh as high as two pounds apiece. Somewhat irregular in shape but extremely solid and with very few seeds. Purplish pink. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

Rutgers. ★ A medium-early Tomato with disease-resistant plants. The sparkling red fruits are smooth, almost round, and very solid. Pkt. 15 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$1.75, lb. \$6.

Stone. An unusually productive, smooth, bright red Tomato. It is a favorite for canning and a most dependable sort for main crop in both market- and home-gardens. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Trucker's Favorite. A dependable, late, main-crop, purple sort, bearing large, flattened fruits which are smooth and solid and of fine quality. The vines are not subject to blight. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., $\frac{1}{4}$ lb. \$1.50, lb. \$5.

Yellow Varieties

Golden Queen. Good-sized, round, smooth fruits, bright yellow in color, solid and of splendid quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.

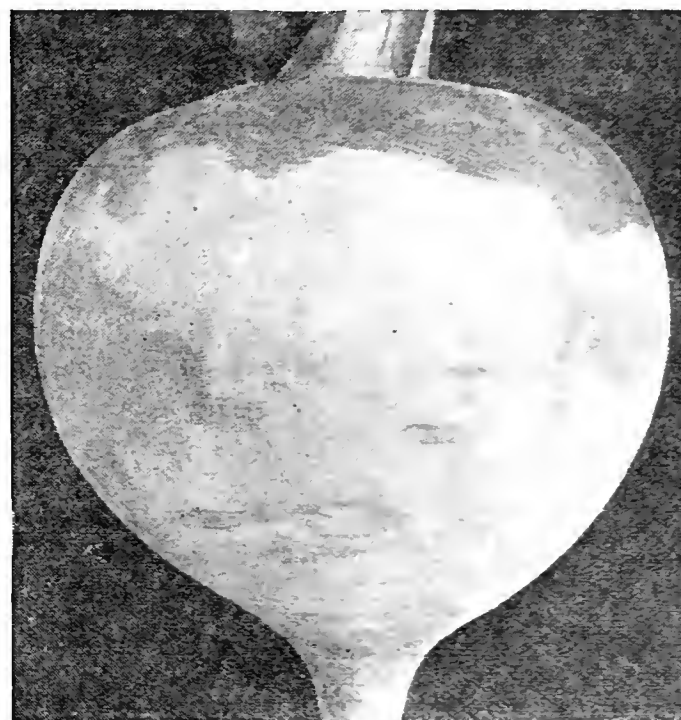
Yellow Oxheart. Like Oxheart in all respects except that the skin and flesh are a beautiful golden yellow. Pkt. 15 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$1, $\frac{1}{4}$ lb. \$3, lb. \$10.

Yellow Plum. The fruits resemble a plum in size and shape but are bright yellow in color. Enormously prolific; in great demand for preserving. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$2, lb. \$7.

Yellow Ponderosa. Skin clear golden yellow; flesh pale yellow, solid and meaty, mild and sweet. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25, lb. \$8.



Greater Marglobe Tomato



Purple-Top White Globe Turnip

TURNIP

The main crop is usually sown in July or August, to mature during the fall, but early-season crops can be obtained by sowing the quick-maturing varieties as soon as the ground can be prepared in the spring. Sow the seed thinly and cover with $\frac{1}{2}$ inch of soil. The early sorts should stand 3 to 4 inches apart in the rows and the large main-crop Turnips about 6 inches.

*An ounce of seed will sow about 100 feet of drill;
a pound will sow an acre*

Cow Horn. Roots shaped rather like a carrot, often over a foot long and 3 inches in diameter. Skin and flesh white. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts., 5 lbs. \$3.25.

Extra-Early White Milan. The quickest growing of the Turnips. The roots are small and flat with pure white skin and flesh; mild and sweet. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.

Purple-Top Strap-Leaf. ★ The roots are flat and quite large; skin white except for a ring of purple around the top; flesh white, fine-grained and of excellent table quality. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts., 5 lbs. \$3.25.

Purple-Top White Globe. ★ The roots are large, nearly round, white with upper third purple. The flesh is firm and of good quality. Productive and a splendid keeper. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 35 cts., lb. 90 cts., 5 lbs. \$4.

Seventop. A variety widely grown throughout the South in regions of milder winters. Used extensively for winter greens. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

Yellow Globe. Round, smooth roots of medium size, with light yellow skin and flesh. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

Rutabaga or Swede Turnip

Rutabagas are grown much like garden Turnips but they require a longer season and attain a larger size. Sow during June or early July and thin out to 8 to 10 inches. Where the summers are temperate an early crop can be grown from spring sowings.

Improved Purple-Top. ★ Large, globular roots. Skin smooth, light yellow with purple top; flesh yellow, firm, and of fine quality. Can be stored in good condition all winter and well into the following summer. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

Sweet German. A large, globe-shaped variety with white skin and flesh. Fine-grained, solid and sweet. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 30 cts., lb. 75 cts.

Scott's Flower Seeds



GROWING FLOWERS FROM SEEDS

For best results, use a shallow box filled with light, rich soil not likely to bake or form a crust when the surface dries, and which has been treated with Formaldehyde Dust or Semesan. Tamp firmly, so that the level is about half an inch below the top of the box. Make shallow furrows crossways, about an inch apart. Very fine seeds, like Petunias and Portulacas, need merely marks; large seeds, like Scabiosas, Lupines, and Four-o'Clocks, should have furrows a half-inch deep. Sow the seed thinly in the rows, and label each row. Sift fine soil, mixed with sand, over the seeds, covering them to the soil-level. Then press the surface with a board or a brick, and water with a very fine nozzle or sprinkle the surface with a whisk-broom dipped in water. Cover the box with a sheet of glass and newspaper, and set it in a warm position, watching from day to day to see that the surface does not get dry or become soggy.

As soon as the seedlings break through the ground, the newspaper must be removed and the box set where it will receive the largest amount of sunlight. When the first leaves are fully formed, remove the glass or tilt it to admit air; when the seedlings are all up and gathering strength, take off the glass.

Special care will be needed in watering. If too much water is used, the seedlings are likely to damp off; if not enough, they will not grow rapidly.

While the seeds are growing, prepare other boxes into which to transplant them. Fill with light, rich soil and mark the surface into 2-inch squares, and when the seedlings have acquired their second set of leaves, transplant them. They will need shading until they take hold of the ground. After that, give them plenty of light and water until it is warm enough to set them outdoors.

If you have a coldframe, the seedlings may be transferred from the seed-trays to the coldframe instead of into boxes.

Perennials require exactly the same treatment, except that sowing may be delayed until the annuals are out of the way, and the seedlings may be grown on in a temporary nursery until autumn when they must be moved to the beds in which they are to flower next year.

Good results can also be obtained by sowing most annuals outdoors any time from early April to June.

Acroclinium

Annual

Double Large-flowering Hybrids. Beautiful Everlasting Flowers in salmon, apricot, pink, rose and cerise, white and creamy tones with golden centers. For drying, cut as soon as they open. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

Ageratum • Floss Flower

Annual

Excellent for low borders and edging, and is often used for porch-boxes. Can be sown outdoors in May, but to have blooms earlier start indoors in March.

Blue Perfection. Pretty, deep lavender-blue flowers. Plants grow about 15 inches high. Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts.

Dwarf Blue Boy. A new variety only about 4 inches high. Very uniform growth, completely covered with bloom in rich shades of blue. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts.

Imperial Dwarf Blue. Perfectly formed little plants about 8 inches tall, with flowers of clear blue. Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts.

Little Blue Star. Tiny plants, not over 5 inches high, covered with masses of bright blue flowers. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts.



Alyssum saxatile

Alyssum

Annuals and Perennials

The ever-popular and always satisfactory flower for edging beds or planting in porch-boxes or rockeries. Sow the seed in the open ground any time from early April to June. Blooms all summer.

Lilac Queen. Annual. Dwarf, compact plants rarely 6 inches high. Flowers deep lavender-lilac. A very pretty variety. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Little Gem. Annual. A dwarf form which makes dense, round, little bushes about 6 inches high, covered with very white flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Saxatile compactum, Blanket of Gold. Perennial. Bushy plants a foot high. Tiny bright yellow flowers in clusters. A good rock-plant. Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts., oz. \$1.25.

White Carpet. Annual. The name describes it—a carpet of white only 2 to 3 inches high. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

White Sweet. Annual. The old-fashioned variety. Low-growing and spreading. Sweet-scented, pure white flowers. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.

Amaranthus

Annual

Start seed in house or hotbed early in spring, or in a special seed-bed outdoors later on and transplant to place where they are to bloom.

Molten Fire. One of the most beautiful foliage plants. Grows 4 feet high and each lateral produces a poinsettia-like tuft of flaming fire. Pkt. 15 cts., 1/4oz. 75 cts.

Sunrise. Crimson foliage with a strong tinge of bronze. A cluster of bright scarlet leaves grows at the end of each branch. Extremely showy. Pkt. 25 cts., 1/4oz. \$1.

Tricolor. Joseph's Coat. Tall, erect plants with luxuriant foliage gorgeously marked with scarlet, yellow, and green. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Aquilegia • Columbine

Perennial

Favorite border perennials, blooming in May and June and thriving best in moist, partially shaded spots. Sow seed from May to August. Plants require no protection over winter.

Long-spurred Hybrids, Mixed. These are the finest of the Columbines, producing large flowers in a great variety of delightful colors. Pkt. 10 cts., 1/4oz. 75 cts., oz. \$2.50.

Long-spurred Hybrids, Mrs. Scott Elliott's Strain, Mixed. From May to midsummer these will give a wonderful show of color. Plants grow about 3 feet high and flower profusely. Mixed colors, pkt. 25 cts., 1/4oz. \$1, oz. \$3.50.

Arabis • Rock Cress

Perennial

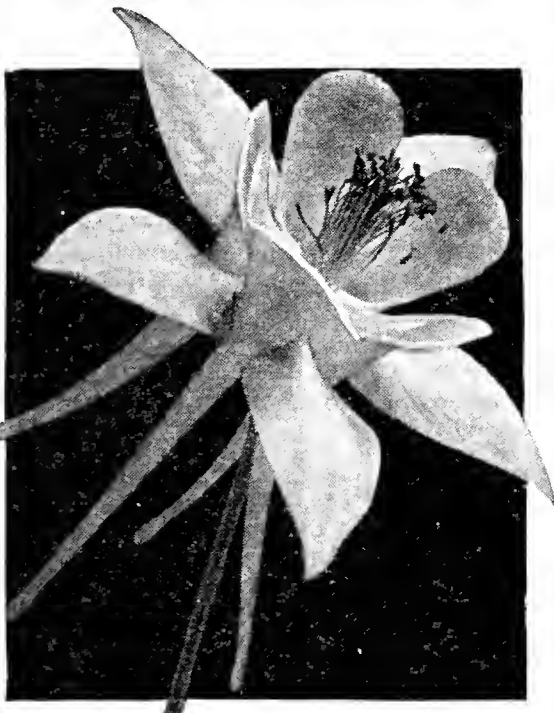
Alpina. Mountain Rock-Cress. Excellent rock-garden or edging plant. Foliage gray-green. Flowers white, in early spring. Pkt. 10 cts., 1/4oz. 25 cts.

Arenaria • Sandwort

Perennial

Grandiflora. Trailing plant with bright green foliage, suitable for rock-crevices or well-drained banks. Flowers white, with pale green centers. Pkt. 25 cts.

Montana. Popular rock-garden trailer with creeping stems and tiny, light green foliage. Flowers glistening white, with pale, apple-green eyes. Pkt. 25 cts.



Aquilegia, Mrs. Scott Elliott's Strain

Antirrhinum • Snapdragon

Annual

A free-blooming garden flower of the easiest culture, producing its spikes of lovely flowers all summer and fall.

Sow the seed in April, transplanting, when 2 to 3 inches high, to the garden.

TALL GIANT-FLOWERED. A fine strain for bedding or cutting as the spikes are heavy and long.

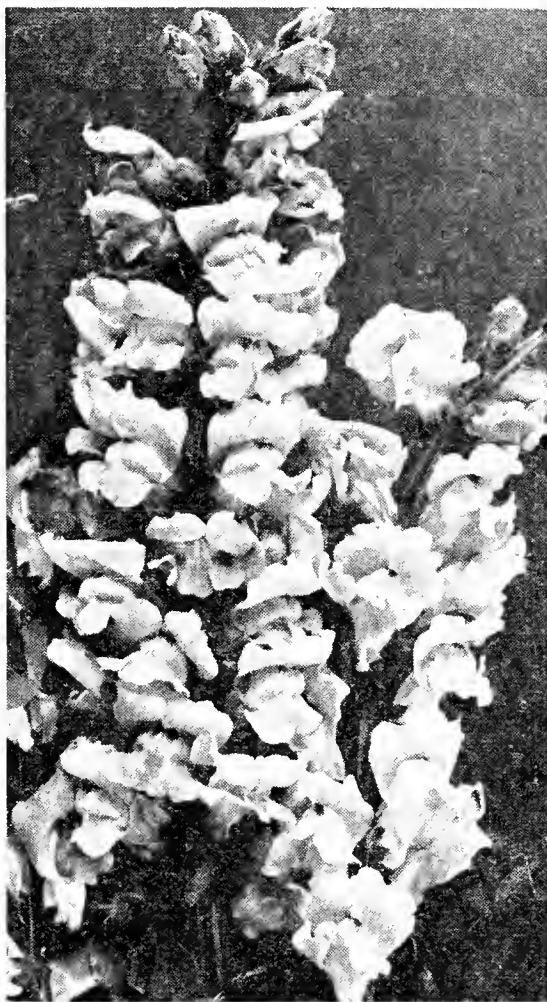
Apple Blossom. Soft apple-blossom-pink.

Canary Bird. Brilliant canary-yellow with deeper yellow lip.

Cattleya. Fine spikes of orchid-lavender—a lovely shade.

Copper King. Velvety bronzy copper.

Old-Gold. Rich old-gold, flushed rose.



Antirrhinum (Snapdragon)

Orchid. That peculiar shade known by this name.

Purple King. Glowing dark velvety crimson-purple.

Ruby. Rich velvety ruby-red.

Snowflake. Pure white, with yellow lip.

The Rose. Deep rose-pink.

Finest Mixed. A mixture of all the colors.

All Tall Giant-flowered Antirrhinums, pkt. 25 cts., 1/4oz. \$1, oz. \$3

HALF-DWARF LARGE-FLOWERING, MIXED. A nice strain for bedding, with heavy spikes of good length for cutting. Good mixture of colors. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

GIANT-FLOWERED, MAJESTIC TYPE (RUSTPROOF), MIXED. Our new rustproof strain of the Tall Large-flowered type. Try these where rust has been troublesome. A fine mixture of all colors to be found in this type. Pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.50.



Arctotis

Arctotis

Annual

Its rich and abundant blooming makes it a very desirable plant for cutting.

Giant Hybrids. A brilliant assortment of orange and bronzy red shades, rose, cream, yellow and salmon. Should be started indoors early. Pkt. 25 cts.

Grandis. Blue-eyed African Daisy. Plants 2 feet high, with silvery white foliage and 2 1/2-inch, daisy-like, silvery white flowers with sky-blue eyes. Pkt. 10 cts., 1/4oz. 25 cts.

Armeria • Sea-Pink

Perennial

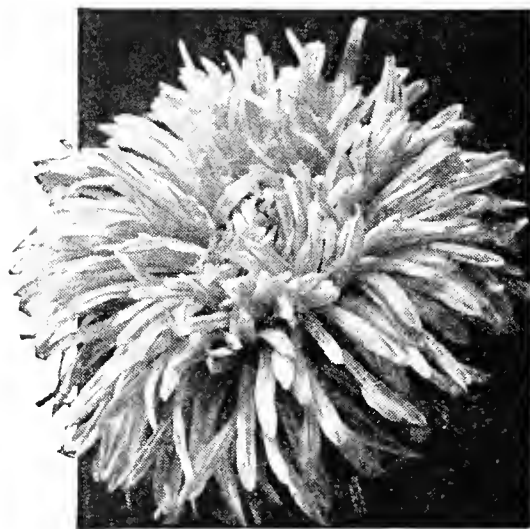
Rock-garden or edging plant making handsome, evergreen, mossy tufts from which rise clustered flowers like clover blossoms.

Cephalotes. Giant Thrift. Rose and White. Pkt. 10 cts., 1/4oz. 75 cts.

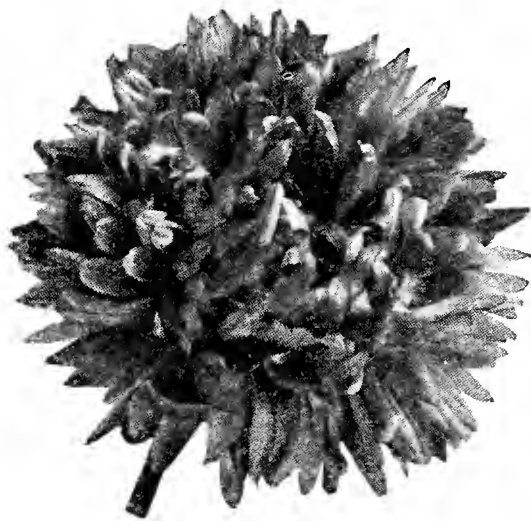
Lauchiana. Dwarf Thrift. Bright rose. Pkt. 25 cts., 1/4oz. \$2.



Arenaria montana



Aster, California Giant



Aster, Heart of France

Asters *Annual*

Asters prefer an open, sunny situation and they respond amazingly to fertilizers and good cultivation. It is advisable to change the location of the Aster-bed each year if you want large flowers and lots of them. For early bloom, start the seed in a window-box or hotbed, in March, giving the little plants plenty of light and water as required, and thinning 3 to 4 inches apart, or transplanting them when a few inches high to small pots. Set them out after danger from frost is past. For solid beds of color, set the plants 8 to 10 inches apart, but if large flowers and long stems are wanted for cutting, plant at least 1 foot apart in rows 1 1/2 to 2 feet apart. The seed may be sown outdoors in early May with good results except that the plants will bloom later.

EARLY-BLOOMING

Queen of the Market. (Wilt-resistant Strain.) Low, bushy plants bearing quantities of large flowers from July on.

White	Lavender
Pink	Purple
Crimson	Mixed Colors

All Queen of the Market Asters, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50

MIDSEASON BLOOMING

Improved Crego. (Wilt-resistant Strain.) Large flowers, often 5 inches across, with twisted and curled petals, are freely produced on long stems. They bloom just after the early varieties.

Blue Flame	Light Blue
Cattleya (orchid)	Peach Blossom
Crimson	Shell-Pink
Dark Violet	White
Deep Rose	Mixed

All Improved Crego Asters, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50



Aster, Aurora

GIANTS OF CALIFORNIA IMPROVED. Large, full flowers of the Crego type, with curled and interlaced petals, on long, heavy stems. Strong, upright plants that bloom from late summer until frost.

Carmine-Rose	Light Blue
Dark Purple	Peach Blossom
Light Purple	White
Mixed	

All Giants of California Improved Asters, pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.50

CALIFORNIA SUNSHINE, MIXED.

Immense, single flowers, 4 to 5 inches across, with a single row of petals surrounding large yellow quill-like center discs. Branching plants 2 to 3 feet tall. Excellent for cutting. Mixed colors, pkt. 25 cts., 1/4oz. \$1, oz. \$3.

GIANT BRANCHING LATE-BLOOMING. (Wilt-resistant Strain.) A wilt-resistant strain of late-blooming Asters. Valuable to finish the season.

Crimson	Deep Rose
Dark Blue	White
Mixed	

All Giant Branching Late-blooming Asters, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50

MISCELLANEOUS TYPES

AURORA. A free-flowering Aster with large, full flowers, quilled centers and outer band of broad petals.

Blue. Light blue, yellow center. Pkt. 25 cts.

Golden Sheaf. (Wilt-resistant.) Double; yellow. Pkt. 25 cts.

Edelweiss. (Wilt-resistant.) Dwarf plants 6 to 8 inches high, covered with semi-double, snow-white flowers in early September. Pkt. 25 cts.

Heart of France. (Wilt-resistant.) Medium-sized flowers of rich dark red. Branching plants 1 1/2 to 2 feet high. Blooms in late August. Pkt. 25 cts., 1/4oz. 75 cts., oz. \$2.50.

Super Giant, El Monte. This fine Aster received special mention in the 1936 All-America Selections. Large crimson flowers, with interlaced, plume-like petals. Each plant produces 6 to 8 of these huge flowers. Pkt. 25 cts., 1/4oz. \$1, oz. \$3.



Giant California Sunshine Asters

Asters

Perennial

Michaelmas Daisies. Tall, autumn-flowering Daisies in various shades. **Mixed Colors.** Pkt. 15 cts., 1/4oz. 75 cts., oz. \$2.50.

Balloon Vine • Love-in-a-Puff

Annual

A rapid-growing annual climber with dark green leaves and small white flowers, followed by curious balloon-like seed-pods. Pkt. 5 cts., 1/2oz. 25 cts.

Balsam • Lady's Slipper

Annual

Tall Double, Mixed. Large flowers, resembling camellias, in self colors, as well as spotted and blotched varieties. The seed should either be started inside or sown outdoors late in May when the soil and weather are warm. Pkt. 5 cts., 1/4oz. 25 cts., oz. 75 cts.

Begonia

Tender Perennial

The Begonias are great favorites, both as pot-plants in the home in winter and for outdoor bedding during the summer. Seed is fine and must be sown on well-prepared, rich soil in the greenhouse or in shallow boxes placed in a warm, sunny window.

Gracilis, Luminosa. Large bright scarlet flowers. Pkt. 25 cts.

Prima Donna. Light rose-pink flowers. Extra fine. Pkt. 25 cts.

Tuberous-rooted Begonia Bulbs. See page 38.

Bellis • English Daisy

Biennial

Double Giant-flowered, Mixed. Useful for beds and edging, thriving in partial shade or full sun. Will bloom the first year if seed is planted very early under glass but best results are obtained by sowing seed in late summer and carrying over winter in a cold-frame. Fine mixture of colors. Pkt. 10 cts., 1/4oz. 60 cts., oz. \$2.



Annual Calliopsis

Calliopsis (Coreopsis) Tickseed

Annual

Easy to grow, free-blooming, and a favorite for cutting. Especially nice for edging beds or for planting in pots. Sow in April or May and thin to stand 6 to 8 inches apart.

Crimson King. Deep crimson, yellow backs.

Drummondii. Golden Wave. Medium tall, covered with bright golden yellow flowers with brown centers.

Golden Ray. Golden yellow.

Tiger Star. Yellow and brown.

Mixed. A variety of colors.

All Calliopsis, pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Cannas

Annual

Large-flowered, Dwarf, Mixed. Saved from brilliantly colored varieties, including red, yellow, and various striking combinations. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

For Canna Roots, see page 39.

Campanula Medium Canterbury Bells

Biennial

Lovely, bell-shaped flowers. One of the finest border plants. Sow the seed any time from early June to August, and protect the plants with straw or leaves over winter.

Single Varieties, Mixed. The true "Canterbury Bells." Good mixture of colors. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Calycanthemum, Mixed. Cup-and-Saucer. A very pretty double form in a good mixture of colors. Pkt. 15 cts., 1/4oz. 75 cts., oz. \$2.50.



Calendula, Campfire

Calendula • Pot Marigold

Annual

Among the brightest and easiest to grow of all garden annuals. They prefer a sunny location but will thrive on any soil. Sow the seed during April or May and thin the plants to 8 to 10 inches.

Campfire. A vigorous grower with large, brilliant orange flowers having a scarlet sheen and a full yellow center. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Chrysantha (Sunshine). Superb new variety with rich, gleaming yellow flowers like quilled Chrysanthemums. The rays are long and slender, curving inward. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Lemon Queen. Like Orange King but the flowers are clear lemon-yellow. Pkt. 10 cts., 1/4oz. 20 cts., oz. 60 cts.

Orange King. Large, double flowers of deep glowing orange. Pkt. 10 cts., 1/4oz. 20 cts., oz. 60 cts.

Orange Shaggy. Deep orange color, shading lighter at the center of flower. Long, fringed, overlapping petals make the blooms graceful and attractive. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Radio. A new type. Full flowers with quilled petals; rich glowing orange. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Double Mixed. Pkt. 10 cts., 1/4oz. 20 cts., oz. 60 cts.

Canary-Bird Vine Tropaeolum peregrinum

Annual

A quick-growing, slender annual vine with light green, fern-like leaves and brilliant yellow flowers. Pkt. 10 cts., 1/2oz. 25 cts., oz. 45 cts.

Carnations

Early Dwarf Double, Mixed. Biennial. Dwarf, erect, free-flowering strain. Extremely hardy. Grows 15 to 18 inches tall. Comes in a wide range of colors. Pkt. 25 cts., 1/4oz. \$1, oz. \$3.

Enfant de Nice, Mixed. Annual. The plants are robust and upright, with long, strong stems and flowers 2 1/2 to 3 inches in diameter. It is the last word in this popular flower. Good mixture of colors. Pkt. 25 cts., 1/8oz. 75 cts.

Grenadin, Cardinal-Red. Perennial. An early-flowering type with large brilliant scarlet blooms. Pkt. 25 cts., 1/4oz. \$1, oz. \$3.

Marguerite, Mixed. Annual. An improved, large-flowering strain. The flowers are very fragrant, and last for a long time when cut. Sow early in May. Pkt. 10 cts., 1/4oz. 60 cts., oz. \$2.



Giant Hyacinth-flowered Candytuft

Candytuft • Iberis

One of the best of all low-growing plants for beds and edging. Sow the seed early in the spring, and when the seedlings are strong enough, thin them to stand 6 to 8 inches apart.

ANNUAL VARIETIES

Giant Empress. Extra-large, pure white flowers. Nice for cutting as well as bedding. Pkt. 10 cts., 1/4oz. 25 cts., oz. 65 cts.

Giant White Hyacinth-flowered. Immense, pure white spikes with large individual bracts. Strong plants. An improved florists' variety for cutting or pot-culture. Pkt. 10 cts., 1/4oz. 25 cts., oz. 65 cts.

Umbellata. Blooms quickly from seed. The flowers are in flat clusters and are produced for many weeks.

Lilac
Rose

Crimson
Mixed

Each, pkt. 10 cts., 1/4oz. 25 cts., oz. 65 cts.

PERENNIAL VARIETIES

Gibraltarica Hybrids. A compact form with lilac flowers. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Sempervirens. Perennial or Evergreen Candytuft. Bears pure white flowers in the spring, and the leaves are dark glossy green the year round. Fine for edging. Pkt. 15 cts., 1/4oz. 75 cts., oz. \$2.50.



Carnation

Cardinal Climber

Annual

A slender, quick-growing vine with exceedingly ornamental, deeply cut leaves, and small, star-shaped flowers of a brilliant cardinal-red, borne in the greatest profusion. Sow after the weather and soil are warm. Pkt. 15 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Castor-Oil Bean • Ricinus

Annual

Extremely large plants that may be used for ornamental hedges, for the center of beds of cannas, and as individual specimens wherever a tropical effect is wanted. Sow in May.

Zanzibarensis. A giant strain, that sometimes grows 12 feet high. Dark green, bronze, or reddish foliage. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Finest Mixed. Many different types, varying in color of leaf, stalks, fruit, etc. All large. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Celosia

Annual

These make gorgeous beds and are useful also for borders where bright colors and mass effect are desired. The seed should be started indoors in April or sown in well-prepared soil outdoors late in May.

Childsi, Mixed. Chinese Woolflower. A profusion of massive, wool-like flowers in shades of red and pink. The whole plant is a mass of glowing color, resembling an enormous bouquet. Height 3 feet. Sow seed outdoors after danger of frost is past. Finest mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Cristata, Finest Mixed. Cockscomb. Showy, comb-like heads in a variety of rich colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

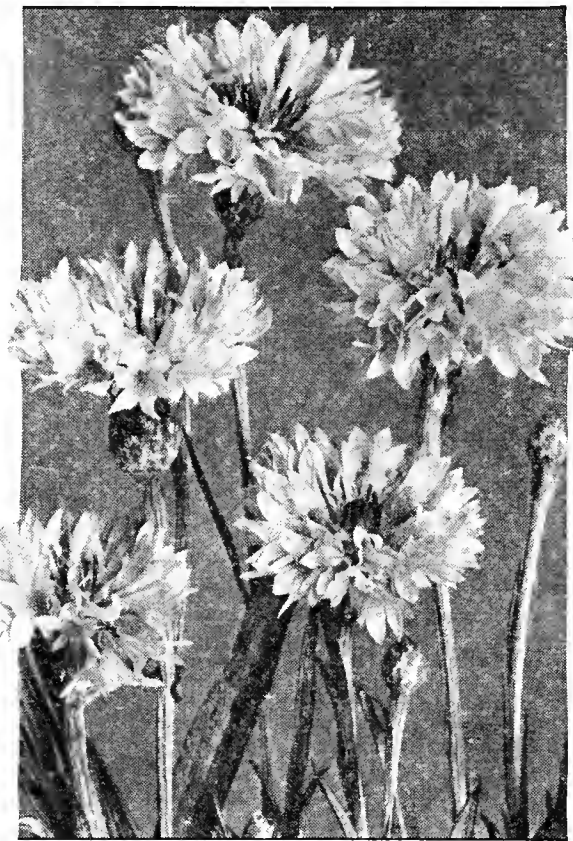
CRISTATA PLUMOSA. IMPROVED FEATHER TYPE.

Pride of Castle Gould. Pyramidal growth with large, painted plumes of brilliant red. Fine for either bedding or pot-culture. Pkt. 15 cts., $\frac{1}{4}$ oz. \$1.50.

Scarlet. A brilliant scarlet selection of the lovely feather type. Pkt. 15 cts., $\frac{1}{4}$ oz. \$1.



Celosia Childsi (Woolflower)



Centaurea cyanus

Centaurea

Annual

A family of very popular and easy-to-grow flowers.

CYANUS. Familiarly known as "Cornflower," "Ragged Sailor," or "Bachelor's Button." About 1½ feet tall, thriving in almost any situation and blooming freely for a long season.

Double Blue. Deep blue Cornflower.

Double Maroon. Fine for a mixed bouquet.

Double Rose-Pink. A lovely shade for cutting.

Double White. A pure white Cornflower.

Double, Mixed. A select mixture of many colors.

All Centaurea Cyanus, pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

IMPERIALIS. The Giant Sweet Sultan, one of the largest of the Centaurea family and the finest for cut-flowers. The large blooms are borne on long stems and are very fragrant

Lavender

Lilac

Purple

Rose

White

Mixed

All Centaurea imperialis, pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1

GYMNOCARPA. Dusty Miller. Grows but a foot high. Excellent for edging beds and borders. Foliage is fern-like and of silvery gray color. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Chrysanthemums

Chrysanthemums thrive in rich soil in any sunny situation and bloom very freely. They require plenty of water.

Coronarium, Double Annual, Mixed. Full-centered flowers in shades of cream, lemon, and gold. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Leucanthemum. Shasta Daisy. Perennial. Hardy plants with lovely white flowers for cutting.

Alaska. Magnificent single flowers of pure white, 5 inches or more in diameter. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Alaska, Double. A double form of the above, with beautiful shaggy white flowers. Pkt. 25 cts.

Cerastium

Perennial

Tomentosum. Snow-in-Summer. A perennial rock-plant with white foliage and starry white flowers. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Clarkia

Annual

Elegans. An attractive variety that makes loose, shrubby plants 2 to 3 feet high, covered with dainty flowers. Nice for cutting.

Double and Single, Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. 75 cts.

Cobaea

Annual

Scandens. Cup-and-Saucer Vine. An annual climber that grows quickly and makes a good screen of foliage. The flowers are large and bell-shaped, blue in color. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. 75 cts.

Coleus

Annual

Choice Mixed. Popular bedding plants grown for their ornamental variegated foliage. Sow seed in boxes indoors and transplant to the open late in May. Pkt. 25 cts.

Coreopsis

Perennial

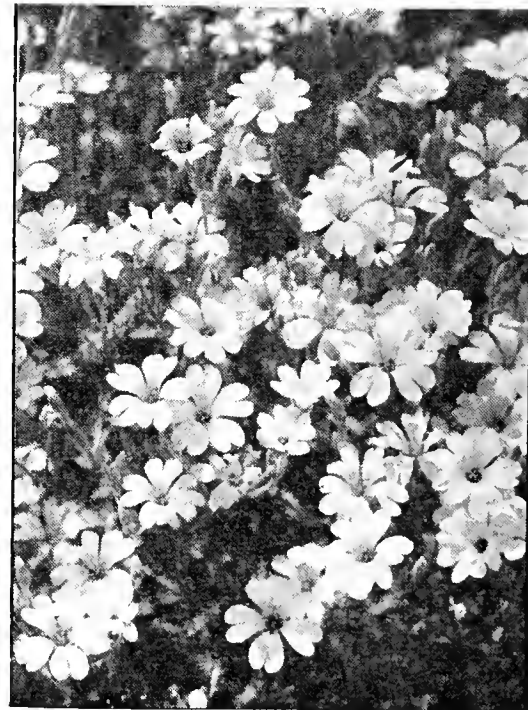
Double Sunburst. Large, golden yellow, fully double flowers 3 to 3½ inches in diameter. A superb cut-flower, or a mass of garden color. Pkt. 15 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Grandiflora. Easily grown from seed sown any time during late spring or summer and, being perfectly hardy, the plants require no protection in winter and will live for years. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Cypress Vine

Annual

Finest Mixed. A graceful, slender climber with very finely cut foliage and bright little flowers which are produced in the greatest profusion. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.



Cerastium tomentosum



Cosmos

Cosmos

Annual

Their free-blooming habit and graceful flowers make the Cosmos one of the most popular flowers for late summer and fall use. Sow seed outdoors about May 1, or, if possible, start the seed indoors in early March.

Early Klondyke, Orange Flare. Gold Medal, 1935 All-America Selections. Deep brilliant orange flowers, borne on long stems. Nice for cutting. Plants 2 to 3 feet high. Pkt. 15 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Extra-Early, Double-crested. An improved strain of the double-flowering form of Cosmos, and while the flowers vary in degree of doubleness, all are beautiful.

Pink Beauty. Soft rosy pink.

Crimson King. Deep rose-crimson.

White Queen. Pure white.

Finest Mixed. All colors.

All Double-crested Cosmos, pkt. 15 cts., $\frac{1}{4}$ oz. 85 cts., oz. \$2.75

Lady Lenox. Blooms enormous, of a most attractive shade of shell-pink. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Mammoth Early-flowering, Mixed. Large-flowered strain which blooms early. Best to use for late sowings outdoors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Mammoth Late-flowering, Mixed. Plants 6 to 8 feet, blooming in September. Large flowers 4 to 5 inches across. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Sensation. Award of Merit, 1936 All-America Selections. Flowers 4 to 5 inches across, on long stems, from 4-foot plants. Blooms for 10 weeks from sowing. Flowers Pink and White. Pkt. 15 cts., $\frac{1}{4}$ oz. 85 cts., oz. \$3.

Didiscus

Annual

Cærulea. Blue Lace Flower. Exquisite, lacelike flower-heads of dainty azure-blue, gracefully borne on long stems. Sow seed in March in hotbed and outdoors in May and June. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Dahlias

Annual

It is easy to raise Dahlias from seed, if started early in spring in hotbed or in a warm window. Set plants out late in May in sunny location, a foot or more apart.

Cactus-flowered, Mixed. Seed saved from the best of the popular Cactus type. Pkt. 25 cts.

Double, Finest Mixed. Seed saved from some of the best named sorts. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Single, Fine Mixed. Seed saved from select flowers of single varieties. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. \$1.

Delphinium

Perennial Larkspur

The finest of blue flowers for the hardy border are the Delphiniums, or Perennial Larkspurs. Sow the seed in May or June and transplant about 1 foot apart in early September. Perfectly hardy.

Belladonna. Long, loose spikes of delicate light blue flowers, of supreme value for cutting, and an excellent garden plant. Pkt. 25 cts., $\frac{1}{8}$ oz. 75 cts., $\frac{1}{4}$ oz. \$1.25.

Bellamosa. This is a taller, straighter plant than Belladonna, and the flowers are rich clear blue, several shades darker. Very striking and handsome. Pkt. 25 cts., $\frac{1}{8}$ oz. 75 cts., $\frac{1}{4}$ oz. \$1.25.

Blackmore & Langdon Strain, Mixed. A famous strain with lovely flowers in a wide range of colors. Strong plants with excellent spikes. Pkt. 50 cts.

Kelway's Gold Medal Hybrids. A famous English strain of great size and vigor, producing flowers in all shades of blue. Pkt. 25 cts., $\frac{1}{8}$ oz. 50 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.25.

Wrexham (Hollyhock Strain). Sturdy plants producing conical spikes of flowers 2 inches or more across, and $2\frac{1}{2}$ to 3 feet long. The colors range from clear light blues and lavenders to shades of deep blue, purple, and mauve. This strain has become very popular. Pkt. 25 cts., $\frac{1}{8}$ oz. \$1.25, $\frac{1}{4}$ oz. \$2.



Delphiniums



Dianthus Heddewigi

Dianthus

A large family of easily grown flowers loved for their fragrance and all-round usefulness.

Chinensis, Double. China Pink. Annual. All plants 20 inches high, with flowers in clusters, in many bright colors. Free-blooming type. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Deltoides. Maiden Pink. Perennial. A creeping rock-garden plant with deep rose-colored flowers on 8-inch stems in midsummer. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Double Mayflower, Mixed. Perennial. Dwarf plants with double flowers in shades of pink. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Heddewigi. Japanese Pinks. Annual. Dwarf, compact plants 10 to 12 inches tall, with large, spectacular flowers, fine for cutting as well as making a grand garden display.

Double, Fireball. Crimson.

Double, Mourning Cloak. Blackish maroon, margined white.

Double, Violet Queen. Violet.

Double, Mixed. All colors.

All Heddewigi, pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts., oz. \$1.25

Single, Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Plumarius. Garden Grass Pinks. Perennial. The Pheasant-Eye, or Clove Pink should be in every garden. Plants 8 to 10 inches with grass-like foliage and fragrant, fringed flowers. Sow from April to August.

Single, Mixed. Many beautiful colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Digitalis • Foxglove

Biennial

A plant for the back of the border. Spikes of thimble-shaped flowers on plants 3 to 4 feet tall, during June and July. Sow in early summer and transplant in the fall.

Hybrida Lutzi. Magnificent, 4-foot plants with lovely salmon flowers. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

Isabellina. Fine spikes of yellow blossoms that deepen to chamois. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

The Shirley, Giant Hybrids. An excellent strain with large flowers ranging in color from white to dark rose, each with throats spotted with crimson, maroon or chocolate. Plants 5 to 7 feet tall, with 4-foot spikes of bloom. Pkt. 15 cts., $\frac{1}{4}$ oz. 75 cts.

Finest Mixed. All types and colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.



Dimorphotheca

Dimorphotheca African Daisy

Annual

Dwarf plants, 12 to 15 inches high, with foliage close to the ground. Daisy-like flowers 2 to 3 inches across, with narrow petals. Flowers close toward evening.

Aurantiaca, Mixed. Shades of yellow, orange, and white. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Aurantiaca, Orange, Improved. An improved strain of the original orange variety. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Dolichos • Hyacinth Bean

Annual

Lablab, Mixed. Very pretty annual climber quickly growing 8 to 10 feet and bearing quantities of clustered flowers like pea blossoms, followed by lustrous purple pods. Good mixture of colors. Sow the seed in late May. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.

Eschscholtzia California Poppy

Annual

These hardy little annuals make very bright beds and bloom from June until frost. Flowers resemble single Poppies. Sow in early spring, where they are to bloom.

SPREADING VARIETIES

Aurantiaca. Orange.

Carmine King. Deep carmine.

Chrome Queen. Amber-yellow.

Mikado. Orange-crimson.

The Geisha. Brilliant gold inside, orange-crimson outside, fluted.

All Eschscholtzias, pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1

Mixed. All colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

ERECT VARIETY

Ramona. Golden bronze, coppery rose outside, frilled and incurved. Pkt. 10 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

Euphorbia

Annual

Variegata. "Snow-on-the-Mountain." Showy plants growing about 2 feet high, with ornamental deep green foliage, bordered and marked with white. Seed should be sown during May. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.



Eschscholtzia, Ramona

Four o'Clock • Mirabilis

Annual

Jalapa, Mixed. "Marvel of Peru." Makes most effective beds and annual hedges. The plants grow about 2 feet tall, bearing quantities of fragrant flowers which open late in the afternoon. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Gaillardia • Blanket Flower

Extra-good bedding plants, and especially desirable cut-flowers.

Burgundy. Perennial. A new variety with large, wine-colored flowers. Very choice. Pkt. 25 cts., $\frac{1}{4}$ oz. 90 cts., oz. \$3.

Maxima aurea. Perennial. Rich golden yellow flowers with a large red eye. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Picta, Mixed. Annual varieties in various colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

The Dazzler. Perennial. Very large flowers of blazing orange-scarlet, illumined by a brilliant yellow edge at the tip of each ray or petal. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

Geranium

Annual

Fine Mixed. Great favorites for bedding and window-boxes. Seed saved from the choicest varieties. Pkt. 25 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.



Geum, Mrs. Bradshaw



Gaillardia, The Dazzler

Geum • Avens

Perennial

Lady Stratheden. Practically the same plant as Mrs. Bradshaw, except that the flowers are shining golden yellow. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$3.

Mrs. Bradshaw. Handsome, fairly dwarf border plant with attractive foliage, and double scarlet flowers with crimped and ruffled petals. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$3.

Globe Amaranth Gomphrena

Annual

Mixed Colors. The plants grow 2 to 3 feet tall, with globe-shaped flowers which may be cut and dried in their natural color for winter bouquets. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Godetia • Satin Flower

Annual

The plants are bushy, with attractive foliage, and the flowers are quite large, somewhat resembling single hollyhocks. Godetias make fine pot-plants.

Dwarf Double Azalea-flowered, Mixed. Lovely azalea-like flowers in various brilliant colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Sybil Sherwood. An upright plant with single flowers of bright salmon-pink. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Gourds

Annual

In addition to their interesting fruit, many of which are useful as well as ornamental, the vines have large foliage excellent for covering fences, stumps, trellises, etc. Sow the latter part of May.

Calabash Pipe or Powder-Horn. An intriguing pipe-shaped variety. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Cave-Man's Club. Dark green; knobby; club-shaped. Pkt. 10 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.

Dipper. The ripe fruits, cut away and cleaned out, make very serviceable dippers. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Dish-Cloth. Sometimes called Sponge Gourd. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.

Ornamental, Mixed. Includes a great number of interesting and diverse forms. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts.



Gypsophila elegans alba grandiflora

Gypsophila • Baby's Breath

These are largely used in making up bouquets and are also most attractive garden plants.

Elegans alba grandiflora. Annual Baby's Breath. An improved strain with pure white flowers. Pkt. 10 cts., 1/4oz. 20 cts., oz. 60 cts.

Paniculata alba, Single. Perennial. Tiny white flowers in airy sprays. Excellent for cutting. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Paniculata alba, Double. Fine sprays of little, double, pure white flowers. Dries nicely for winter bouquets. Pkt. 25 cts., 1/8oz. \$1.

Repens alba. Perennial. A trailing variety, not over 6 inches high, with white flowers in July and August. Pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50.

Repens rosea. Perennial. Rose-colored variety of the above. Pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50.

Helianthemum • Sun Rose

Perennial

Mutabile, Mixed. Rock-plant of shrubby habit, growing 8 to 12 inches high. Foliage evergreen. Flowers of pastel shades. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Helianthus • Sunflower

Annual

Sow the seed in April or May and give the plants plenty of room. Fine for massive borders and backgrounds.

Dwarf Double Chrysanthemum-flowered. Strong plants, growing 4 to 5 feet high, with many branches bearing big, double flowers like golden chrysanthemums. Pkt. 10 cts., 1/2oz. 25 cts., oz. 75 cts.

Mammoth Russian. The common variety and the largest and most productive, growing to a height of 6 to 8 feet. Oz. 10 cts., 1/4lb. 20 cts., lb. 50 cts.

Maroon Prince. Single red flowers on 4-foot plants. The best red Sunflower. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Miniature (H. cucumerifolius). Single bright yellow flowers, with dark brown centers. Fine for cutting as well as display. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Helichrysum • Everlasting

Annual

The best of the "Straw Flowers." To preserve the flowers for permanent bouquets, pick them when half opened and hang them by the stems, head down, to dry in a shady place. Double, bright-colored flowers.

Fireball or Scarlet **Salmon Queen**
Goldenball **Silverball**
Rose Queen **Violet Queen**
Finest Mixed

All Helichrysoms, pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Heliotrope

Annual

Choice Mixed Colors. Prized for its delightful fragrance. Can be grown in pots or in the garden. Start the seed indoors in March, or sow outdoors after the soil and weather are warm. Pkt. 15 cts., 1/4oz. 75 cts.

Hesperis • Rocket

Perennial

Matronalis. Sweet Rocket. The plants make large clumps 2 to 3 feet high, with showy spikes of red flowers. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Hibiscus • Marsh-Mallow

Perennial

Finest Mixed. Shrubby perennials 4 to 6 feet tall with large foliage and immense, funnel-shaped flowers 6 to 12 inches across. Fine mixture of colors. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Hollyhock

Perennial

Wherever tall-growing plants can be used these are wonderfully effective, with a charm all their own. A favorite for the old-fashioned garden.

Chater's Double, Mixed. An extra-fine strain in many bright colors. Pkt. 10 cts., 1/4oz. 60 cts., oz. \$2.

Single, Finest Mixed. Lovely single flowers in a wide range of colors. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.



Double Hollyhocks



Helianthemum mutabile

Honesty • Lunaria

Biennial

An easily grown plant, about 1 1/2 feet high. The blooms may be dried for winter bouquets. Violet or White, pkt. 15 cts., 1/4oz. 60 cts., oz. \$2.

Humulus • Japanese Hop

Annual

A very rapid-growing annual vine which, on account of its dense, attractive foliage, is valuable for porch-screens and arbors.

Green-leaved or Variegated-leaved. Pkt. 10 cts., 1/4oz. 25 cts., oz. 60 cts.

Hunnemannia • Tulip Poppy

Annual

Sunlite. Semi-double flowers of clear canary-yellow. Very desirable. Grows 1 1/2 to 2 feet tall, with many blooms all summer. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Ipomoea • Morning-Glory

Annual

Fine for covering fences and trellises on account of their rapid, luxuriant growth. They bloom freely all summer. The seed may be soaked in warm water over night to hasten germination.

Heavenly Blue Improved. Blue Moonflower. An early strain of this lovely flower. Deep sky-blue flowers of large size from mid-summer until frost. Start seeds under glass, early. Pkt. 15 cts., 1/4oz. 35 cts., 1/2oz. 60 cts., oz. \$1.

Imperial Japanese, Mixed. Large flowers of various pleasing colors. Sow where they are to bloom as soon as ground gets warm. Pkt. 10 cts., oz. 20 cts., 1/4lb. 50 cts., lb. \$1.50.

Noctiflora. White Moonflower. Large white flowers. Pkt. 10 cts., 1/4oz. 20 cts., oz. 50 cts.

Job's Tears • Coix

Annual

Lacryma. An ornamental grass which grows 2 to 3 feet high and bears large, ivory-white seeds from which it gets its name. The children make necklaces from the hard seeds. Pkt. 10 cts., 1/4oz. 20 cts., oz. 50 cts.

Kochia*Annual*

Scoparia trichophylla. Summer Cypress; Mexican Firebush. Grows about 2 feet high making beautifully rounded bushes like clipped evergreens. In summer, foliage is bright, light green but in fall the whole plant is a ball of crimson. Sow seed in late May. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Lantana*Annual*

Dwarf Hybrids, Mixed. Desirable bedding plants, giving a mass of color; also useful in porch-boxes and pots. Flowers are in clusters. Blooms constantly. Pkt. 15 cts., ¼oz. 60 cts., oz. \$1.75.

Larkspur*Annual*

Favorite, easy-to-grow annuals, producing their tall spikes very freely for several weeks during summer. They are most effective planted in the border in-groups among lower-growing flowers. Sow the seed in April and thin or transplant to stand 8 to 10 inches apart.

GIANT IMPERIAL. A new strain of annual Larkspurs that grows 3 to 4 feet high. Fine well-filled spikes.

Blue Bell. Deep sky-blue.

Blue Spire. Clear violet-blue.

Carmine King. Deep, glowing pink with a fiery sheen, almost scarlet.

Daintiness. Delicate lavender.

Miss California. Brilliant rose-pink.

White King. Pure white.

Mixed. All colors.

All Giant Imperial Larkspurs, pkt. 25 cts., ¼oz. 75 cts.

TALL DOUBLE STOCK-FLOWERED.

Plants 3 feet tall, with candelabra-like branches and long spikes closely set with large, double flowers.

Rosamond. *New.* A lovely shade of pure bright rose. Pkt. 25 cts., ¼oz. \$1.

Fine, Mixed. All the colors of this type. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

DWARF EMPEROR, MIXED. A dwarf, compact strain not over 2 feet tall in an unusual range of colors. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

For Hardy Larkspur, see Delphiniums, page 29.



Lupinus

Lathyrus**Everlasting or Hardy Sweet Pea***Perennial*

Finest Mixed. Hardy climbers, attaining a height of 5 to 6 feet each season and living from year to year. Flowers resemble the old-fashioned Sweet Peas except that they have no fragrance. Pkt. 10 cts., ¼oz. 25 cts., oz. 40 cts.

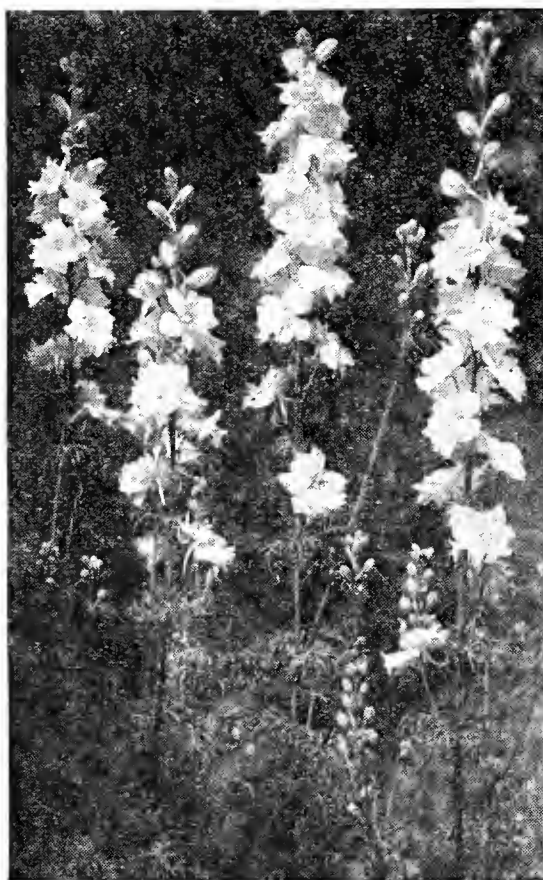
Lily • Lilium*Perennial*

Regale. Most popular and easiest to grow of all Lilies, flowering abundantly within 18 months from seed. Perfectly hardy. Pkt. 25 cts.

For Lily Bulbs, see page 39.

Linum • Flax*Perennial*

Showy plant with gray-green foliage and powder-blue flowers of great delicacy and beauty. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.



Stock-flowered Larkspur, Rosamond

Linaria • Toadflax*Annual*

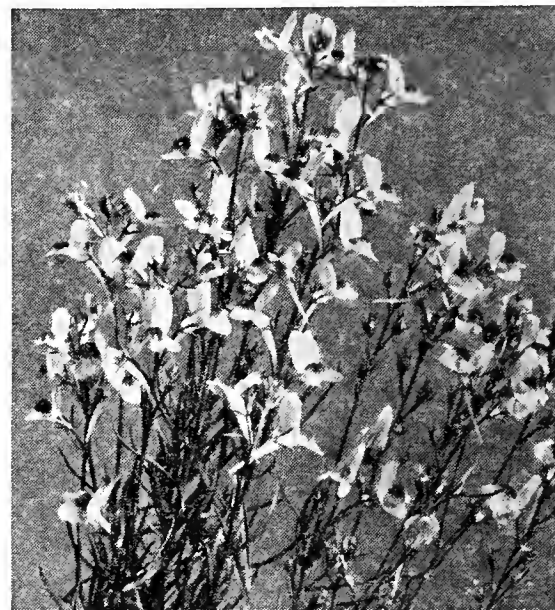
Slender little plants a foot high, bearing dainty, miniature Snapdragons of pink and purple. Excellent for edging.

Maroccana, Fairy Bouquet, Mixed. Compact, 8-inch plants with flowers of various pastel shades. Pkt. 25 cts.

Maroccana, Hybrid Excelsior, Mixed. Plants 1 foot high, with flowers of bright shades. Pkt. 10 cts., ¼oz. 25 cts.

Lobelia*Annual*

Crystal Palace Compacta. Rich dark blue flowers. Dark green foliage. Dainty little plants, popular for porch-boxes, vases, and low beds. Seed should be started indoors in February or March and the plants set out in May. Pkt. 15 cts., ¼oz. \$1.50.



Linaria maroccana

Lupinus • Lupin

The Lupins do well in any good garden soil, preferably with a little shade. They make bushy plants with very attractive leaves and long spikes, closely set with blossoms. Give them plenty of lime, wood-ashes, bonemeal, or other soil-sweetening fertilizers.

Hartwegi, Mixed Colors. Annual. Quick-growing annuals with woolly foliage and stems. Erect spikes with pea-shaped flowers. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Polyphyllus, Mixed Colors. Perennial. Grows 2½ to 3 feet tall. Sow in May or June and thin to 1½ feet apart. Pkt. 10 cts., ¼oz. 25 cts., oz. 75 cts.

Marigold • Tagetes*Annual*

Vigorous, free-blooming annuals, thriving on any soil but preferring plenty of sunlight. The African Marigolds grow about 3 feet tall with immense, globular blooms, while the dwarf French kinds are only about 10 inches high with smaller flowers but more of them.

African, Double, Dixie Sunshine. All-America Winner. A tall, late-blooming variety with ball-shaped flowers of golden yellow. Pkt. 25 cts., ¼oz. 75 cts., oz. \$2.

African, Double, Guinea Gold. All-America Winner. Double, ruffled flowers of pure deep golden yellow, fragrant and long-stemmed. A handsome cut-flower. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

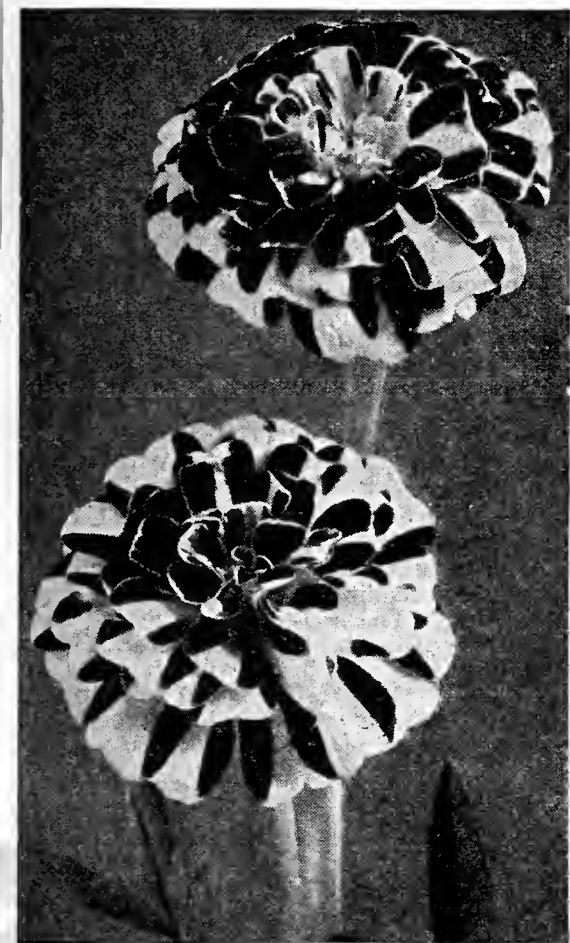
African, Double, Lemon Queen. A companion to Prince of Orange, but clear lemon-yellow. These two varieties, planted on rich soil, produce enormous flowers. Pkt. 10 cts., ¼oz. 75 cts., oz. \$2.

African, Double, Prince of Orange. Very large and double; deep glowing orange. Pkt. 10 cts., ¼oz. 50 cts., oz. \$1.50.

African, Double, Yellow Supreme. All-America Winner. Extra-large flowers, 3 inches or more across, brilliant lemon-yellow. Excellent garden plant, as it begins to bloom early and continues to hard frost. Splendid for cutting. Pkt. 15 cts., ¼oz. 50 cts., oz. \$1.50.

African, Double, Mixed. Shades of orange and yellow. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

Dwarf French, Double, Harmony. An extra-early variety, making 12-inch mounds of bloom. The flowers are a large-crested cushion of golden yellow petals surrounded by mahogany ray petals. Pkt. 15 cts., ¼oz. 50 cts., oz. \$1.50.



Marigold, Double French Royal Scot

MARIGOLD, continued

Dwarf French, Single, Legion of Honor. Bushy. Flowers gold and brown. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Tall French, Double, Royal Scot. All-America Winner. Large flowers of mahogany and gold in symmetrical stripes on 30-inch plants. Pkt. 15 cts., 1/4oz. 50 cts., oz. \$1.50.

Dwarf French, Double, Finest Mixed. Double flowers of orange and yellow, variously striped and marked with reddish brown. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Signata Pumila, Little Giant. Spreading plants 6 inches high, covered with lovely little single flowers of golden yellow. Pkt. 15 cts., 1/4oz. 75 cts., oz. \$2.

Matricaria • Feverfew

Annual

Double, white, button-shaped flowers on aromatic plants. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Mesembryanthemum

Annual

Crystallinum. Ice Plant. Dwarf annual with tender stems and leaves, portions of which are transparent and resemble little icicles. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Tricolor. Flowers brilliant red and white, with black centers. Pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50.

Mignonette • Reseda

Annual

Highly valued for its distinct fragrance.

Giant Machet. An improved strain with giant spikes of reddish green florets. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Machet, Special Mixed. Contains all the Machet varieties. Pkt. 5 cts., 1/4oz. 20 cts., oz. 60 cts.

Mimulus

Annual

Moschatus. Musk Plant. Musk-scented foliage and small yellow flowers. Nice for baskets and vases. Pkt. 10 cts., 1/4oz. \$1.

Myosotis • Forget-me-not

Biennial

Alpestris. A biennial but it will bloom the first summer from seed sown in early spring. If early spring flowers are wanted, sow in July and transplant the young plants to their permanent bed about the middle of September. Pkt. 10 cts., 1/4oz. 75 cts.



Mignonette

Momordica

Annual

Vigorous climbing vines with ornamental fruits, and foliage that is dense enough to make a pleasant shade.

Balsamina. Balsam Apple. Flowers yellow, with dark centers. Fruits orange. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Charantia. Balsam Pear. Pear-shaped fruits. Dense foliage. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Nicotiana

Sweet-scented Tobacco

Annual

Fine annuals for the tall border, thriving best on a deep, rich soil. They grow about 2 1/2 feet high, with large, attractive foliage at the base and clusters of delicately fragrant trumpet-shaped flowers on long stems.

Affinis Hybrids. Pink and red shades in addition to white. A fine sweet-scented strain. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Sanderæ Hybrids. The flowers are larger than the preceding and come in white and shades of pink and red. Pkt. 10 cts., 1/4oz. 35 cts., oz. \$1.

Nasturtiums

Annual

We know of no flowers that are easier to grow or give more general satisfaction than Nasturtiums. They do best in poor soil and they flower all summer long in all kinds of weather.

DOUBLE VARIETIES

Dwarf Golden Globe. All-America Winner. The first of a new gem type. Flowers double, deep golden yellow, sweet scented. Plants produce a great number of blooms which resemble the famous Golden Gleam.

Glorious Gleam Hybrids. All-America Winner. From Golden Gleam and Scarlet Gleam has been derived this remarkable new strain with glorious, double flowers in a beautiful array of brilliant colors, all very sweetly scented. Every plant is a profuse bloomer.

Golden Gleam. All-America Winner. Compact plants 1 to 1 1/2 feet high, with clear, golden yellow, double flowers. In addition to the remarkable doubling of the bloom, the flowers possess a delicate scent which lacks the usual coarseness of the Nasturtium odor.

Scarlet Gleam. All-America Winner. A worthy companion to the famous Golden Gleam. The large, double, fragrant flowers are dazzling scarlet. The dwarf, vigorous plants are profuse bloomers all season long.

All Double Nasturtiums, pkt. 10 cts., oz. 20 cts., 1/4lb. 60 cts., lb. \$1.50

SINGLE VARIETIES

Dwarf Fine Mixed Colors. Fine for beds and edging, any place where masses of color are desired. The plants are covered with flowers in a wide range of colors from June until frost.

Tall Fine Mixed Colors. The tall or climbing Nasturtiums are useful for covering fences, or may be allowed to trail over stumps and rockwork.

All Single Nasturtiums, pkt. 5 cts., oz. 10 cts., 1/4lb. 35 cts., lb. \$1

Nigella • Love-in-a-Mist

Annual

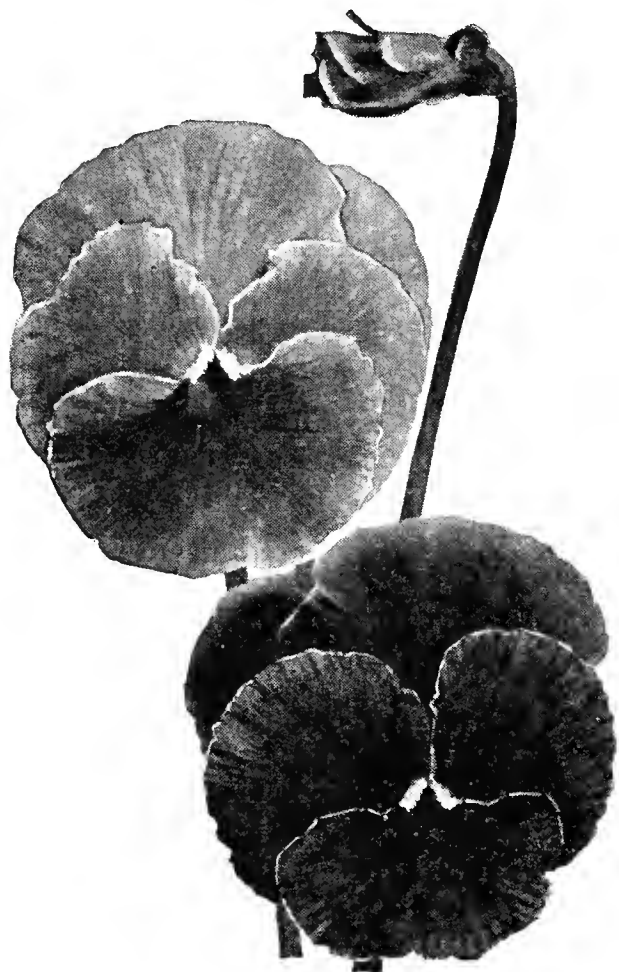
Pretty annual 1 1/2 feet high, for bedding and cutting, easily and quickly grown from seed in any sunny spot.

Miss Jekyll, Blue. Fine double azure-blue. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Miss Jekyll, White. Flowers pure white. Double. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.



Nasturtium, Double Golden Globe



Pansies

Pansies

The best results are secured by sowing in late July or August and protecting the young plants over winter with a covering of strawy manure or a deep blanket of leaves. They will then be ready to begin blooming as soon as the weather opens up in the spring and will continue to flower until hot weather. The next best time to sow is very early in the spring, in February or March, starting the seed in a box indoors or in a coldframe and setting the plants outdoors the latter part of April. If set out in a spot that is shaded part of the day, where the soil is deep and moist, and the flowers picked daily, the plants may be kept blooming all summer.

Giants of California, Mixed. A special mixture of giant types. Pkt. 20 cts., $\frac{1}{4}$ oz. \$1.50, oz. \$5.

Mastodon, Finest Mixed. An American strain with flowers often $2\frac{1}{2}$ inches in diameter. Strong in red and purple shades. Pkt. 20 cts., $\frac{1}{4}$ oz. \$1.50, oz. \$5.

Roggli Giant Blotched, Mixed. A Swiss strain with especially fine coloring. Pkt. 20 cts., $\frac{1}{4}$ oz. \$1.50, oz. \$5.

Superfine Giants, Mixed. A fine strain with jazzy colors, rich in yellow, with many five-blotched types. Pkt. 25 cts., $\frac{1}{4}$ oz. \$2.25, oz. \$7.

Fine Mixed Colors. A fine assortment of select varieties for bedding, including many bright and beautiful colors. Pkt. 10 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.

Physalis

Perennial

Francheti. Chinese Lantern Plant. Flowers yellow with dark centers, and fruits with blood-red inflated calyx which turn bright red when ripe and resemble Chinese lanterns. Attractive when dried for winter use. Pkt. 15 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

Petunias *Annual*

For solid beds of color, borders and edging, vases and porch-boxes, in fact, for every purpose, the Petunias are surpassed by few if any of the easily grown garden annuals. They come into bloom early and continue to flower profusely all summer long, thriving on poor soil and in the hottest weather. Sow the seed in April or May, scattering it thinly on fine sifted soil and, instead of covering it, press it firmly into contact with the earth with a smooth board. When the seedlings are about 2 inches high, transplant them to the place where you want them to bloom. For extra-early flowers, start seed indoors in March or April.

LARGE-FLOWERING SINGLE FRINGED VARIETIES

Dainty Lady. An entirely new variety, with light golden yellow flowers—a shade previously unknown in Petunias. Pkt. 50 cts.

Dwarf Giants of California, Mixed. (Ramona Strain.) An improved new dwarf strain of the well-known California Giants. Flowers are large and beautifully colored, with open throats, well marked and veined. Pkt. 50 cts.

Elk's Pride. Large and very dark purple, plain edged. Pkt. 25 cts.

Pink Beauty. Clear light pink. Pkt. 25 cts.

Pride of Portland. Deep glowing rose. Pkt. 25 cts.

Scarlet Beauty. Crimson-scarlet. Pkt. 25 cts.

White Beauty. Snowy white. Pkt. 25 cts.

Ruffled Giants, Mixed Colors. Immense single flowers with ruffled and fringed petals, in all colors. Pkt. 25 cts.

SINGLE BEDDING VARIETIES

Blue Bedder. Dwarf, compact, erect plants with fine flowers of mid-blue. Pkt. 15 cts., $\frac{1}{8}$ oz. 50 cts., oz. \$2.50.

Flaming Velvet. All-America Winner. The large, showy flowers are brilliant velvety blood-red or scarlet. Pkt. 25 cts.

Martha Washington. Blooms are about 3 inches across, with ruffled edges, blush-pink, shading to dark violet in the throat; veins wine-red. Pkt. 25 cts.

Pink Gem. Grows 5 to 6 inches high, forming a compact ball completely covered with deep pink blooms 2 inches across. Pkt. 25 cts.

Rose of Heaven. Brilliant fiery rose, similar to Rosy Morn, but more brilliant. The best dwarf pink variety. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts., oz. \$2.

Rosy Morn. Vigorous plants, 10 inches tall, compact and free-flowering. Flowers soft carmine-pink with white throat. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts., oz. \$2.

Violacea, Blue Bird. Violet-blue. Extra fine. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts., oz. \$2.50.

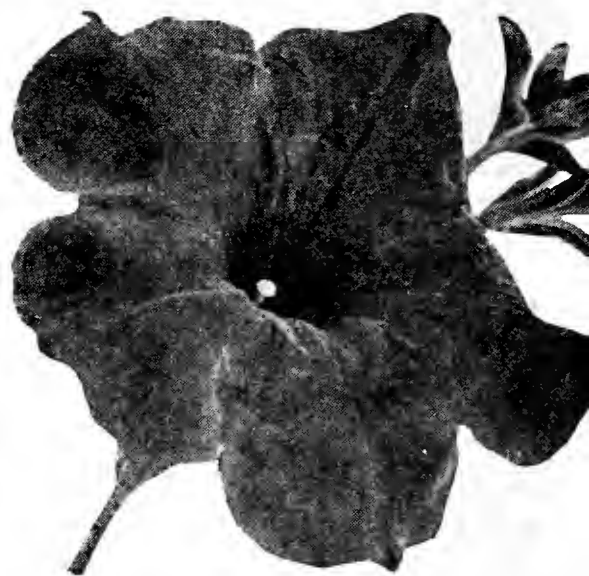
Striped and Blotched, Mixed. Compact plants with flowers striped and blotched. Very striking. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., oz. \$1.50.

Single, Fine Mixed. An excellent assortment for bedding, including many fine colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., oz. \$1.50.

LARGE-FLOWERING DOUBLE FRINGED VARIETIES

Alldouble Giant Fringed, Mixed. A magnificent strain produced by careful hand hybridizing. The flowers are large and have beautifully frilled and crinkled petals. These Petunias make splendid pot-plants. Pkt. \$1.

Large, Double-flowering Fringed, Mixed. A fancy mixture which produces a large percentage of doubles. Pkt. 50 cts.



Petunia, Flaming Velvet

Platycodon • Balloon Flower

Perennial

Erect, leafy plants bearing a profusion of inflated, balloon-like buds, opening to wide, saucer-shaped flowers. Good border perennial for late summer blooming.

Grandiflorum. Steel-blue. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.50.

Grandiflorum album. White. Pkt. 10 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.

Portulaca

Annual

The Portulacas will grow on soil too poor and in places too hot and sunny for any other flower. The plants are low and spreading, commencing to bloom in July and blooming profusely all summer. Sow the seed when the ground gets warm.

Double. Flowers like little roses.

Pink	White
Salmon	Yellow
Scarlet	Mixed

All Double Portulacas, pkt. 10 cts., $\frac{1}{8}$ oz. 60 cts., $\frac{1}{4}$ oz. \$1, oz. \$3

Single, Mixed. Very bright and attractive. Good mixture of colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 35 cts., $\frac{1}{2}$ oz. 60 cts., oz. \$1.

Primula • Primrose

Perennial

Malacoides, Mixed. Fine free-blooming flower for the rocky and perennial border. Sow the seed inside in February or early March and transplant to the open ground in April. The plants are tender and should be given light protection over winter. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

Pyrethrum

Perennial

Very easy to grow from seed sown any time from early spring to late summer. Seed started under glass in February will give blooming plants the first summer. By cutting off the first crop of flowers a second crop will be produced in the fall.

Aureum. Golden Feather. Grown mostly for its showy golden yellow laciniated foliage. Nice for borders. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts.

Roseum, James Kelway. Large, daisy-like flowers of deep scarlet. An excellent cut-flower. Pkt. 25 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.75.

Roseum, Single and Double Mixed. Painted Daisy. These include all shades from deep red to white. Pkt. 10 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.75.

Phlox Drummondii

Annual

Blooming in midsummer, these easily grown flowers make the most brilliant of beds. They prefer an open, sunny situation, but are not particular as to soil and will give good results under almost any conditions. Sow the seed in April or early May and thin the plants to stand about 4 inches apart.

TALL VARIETIES (about 15 in. high)

Crimson	Violet, white eye
Lilac	White
Rose, dark eye	Yellow
Finest Mixed	

All Tall Phlox, pkt. 10 cts., 1/4oz. 50 cts., oz. \$1.50

Gigantea, Art Shades. All-America Winner. A lovely strain with flowers over an inch in diameter of soft pastel shades, each with a distinctive eye. Bushy plants about 10 inches high. Pkt. 25 cts., 1/4oz. \$1, oz. \$3.

DWARF VARIETIES Annual

Nana compacta, Mixed. These grow about 8 inches high and quite bushy, making fine borders and ribbon beds. Mixed colors, pkt. 10 cts., 1/4oz. 60 cts., oz. \$2.

HARDY VARIETIES Perennial

Finest Mixed. Produces large heads of brilliantly colored flowers of many shades. Plants grow 2 to 4 feet high. Pkt. 10 cts., 1/4oz. \$1.50, oz. \$5.

Poppy • Papaver

Although the Poppies last for only a short time, while they are in bloom no flowers can rival them in brilliant colors. The seed is fine and should be scattered thinly in the place where the plants are wanted to bloom, as they do not transplant well. Height, 2 feet. Sow the annual sorts in April and the perennial kinds June to September.

ANNUAL VARIETIES

Double Shirley, Dazzler. Double flowers of vivid orange-scarlet. Pkt. 10 cts., 1/4oz. 25 cts.

Double Shirley, Sweet Briar. Double flowers of the same color as the Single Wild-Rose-Pink. Pkt. 10 cts., 1/4oz. 25 cts.

Shirley, American Legion. Brilliant scarlet, single blooms. An improved Flanders Poppy. Pkt. 10 cts., 1/4oz. 25 cts.

Shirley, Wild-Rose-Pink. Single flowers of soft wild-rose-pink. A beautiful flower. Pkt. 10 cts., 1/4oz. 25 cts.



Papaver nudicaule

POPPIES, continued

Shirley, Mixed Colors. Probably the finest strain of annual, single-flowered Poppies. White and pale pink to bright scarlet and deep crimson, including rose with white edge, red with white edge, etc. Very showy. Pkt. 10 cts., 1/4oz. 20 cts.

Tall Peony-flowered, Mixed. Large, double flowers with plain edges in a wide range of colors. Pkt. 10 cts., 1/4oz. 20 cts.

Tulip Poppy (P. glaucum). Dazzling scarlet with a black maltese cross at center. Pkt. 10 cts., 1/4oz. 25 cts.

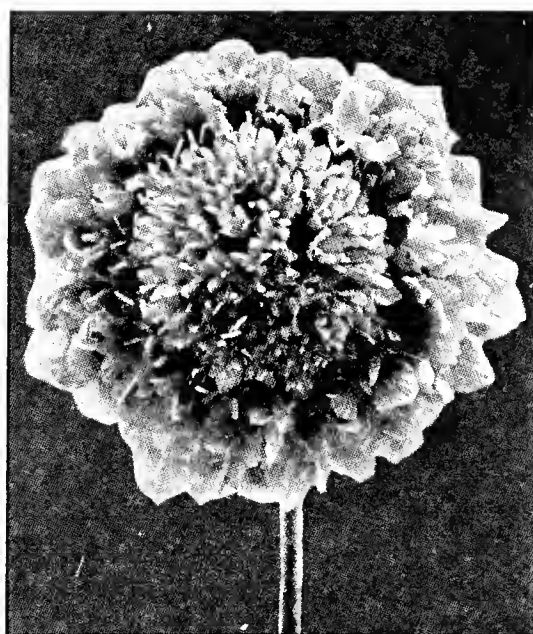
PERENNIAL VARIETIES

Nudicaule, El Monte. Large flowers of deep tangerine-orange. Pkt. 25 cts., 1/4oz. 75 cts.

Nudicaule, Sunbeam Hybrids, Mixed. A fine strain of Iceland Poppies in shades of yellow and orange. Pkt. 10 cts., 1/4oz. 50 cts.

Oriente, Scarlet. The big, bright scarlet Decoration Day Poppy. A hardy perennial form bearing immense single flowers. Pkt. 10 cts., 1/4oz. 50 cts.

Oriente, Mixed. A fine mixture of the various Oriental Poppy colors. Pkt. 10 cts., 1/4oz. 50 cts.



Scabiosa, Peach Blossom

Rhodanthe Swan River Everlasting

Annual

Mixed Colors. Can be dried in its natural colors for winter bouquets. It is an easily grown annual, about 1 1/2 feet tall, with silvery gray leaves and very pretty, little, double flowers. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Salpiglossis • Painted Tongue

Annual

A popular, easily grown garden annual, richly colored and fine for cutting. The flowers are borne in clusters at the top of long stems and are produced very freely from midsummer to fall. Sow the seed in late April or May and thin the plants to stand about 10 inches apart.

Brown and Gold	Scarlet and Gold
Golden Yellow	Velvety Red
Light Blue and Gold	Finest Mixed

All Salpiglossis, pkt. 15 cts., 1/4oz. 35 cts., oz. \$1



Phlox Drummondii, Art Shades

Salvia • Sage

Start the seed indoors or in hotbeds very early, during January or February if possible. When 2 to 3 inches high transplant into small pots or space to 6 inches apart. Transplant to the garden in late May, in a sunny location and rich, deeply dug soil, setting the plants at least 1 1/2 feet apart.

America. Annual. One of the finest of all, particularly for low beds and borders as it grows only about 1 1/2 feet tall. It is an exceptionally profuse and constant bloomer, the plants a mass of light blazing scarlet. Pkt. 10 cts., 1/4oz. \$1.50, oz. \$5.

Bonfire. Annual. A select strain, fine for mass planting, as it is very compact in growth and has exceedingly brilliant scarlet flowers. Pkt. 10 cts., 1/4oz. \$1.25, oz. \$3.50.

Farinacea, Blue Bedder. A fine perennial with light blue flowers on spikes about 2 feet long. Seed sown in early May should give plants that bloom from July to frost. Pkt. 15 cts., 1/4oz. \$1.75, oz. \$6.

Splendens. Annual. The original Scarlet Sage. It grows about 2 feet tall and is covered with large, bright red blossoms all summer long. Pkt. 10 cts., 1/4oz. 75 cts., oz. \$2.25.

Zurich. Annual. An early variety only 1 foot high. Pkt. 10 cts., 1/4oz. \$1.50, oz. \$5.

Scabiosa • Mourning Bride

Annual

It is a pity this flower does not have a more pleasing name, for it is one of the finest annuals for cutting. Grows in almost any situation; 2 1/2 to 3 feet high; blooms for a long season.

Azure Fairy. Azure-blue.

Black Prince. A very dark purple.

Cherry-Red. A nice shade of red.

Loveliness. Soft salmon-rose.

Peach Blossom. Peach-blossom-pink.

Shasta. Pure white.

Above Scabiosa, pkt. 15 cts., 1/4oz. 25 cts., oz. 75 cts.

Giant-flowered, Mixed. Pkt. 10 cts., 1/4oz. 25 cts., oz. 75 cts.

Schizanthus • Butterfly-Flower

Annual

Wisetonensis Excelsior compactus. A dainty little plant 6 inches high, adapted to bedding and borders. Blooms freely during the entire summer. An excellent pot-plant. Finest mixed, pkt. 15 cts., 1/4oz. \$1.25.

Stock • Gilliflower

Annual

Large-flowering, Mixed. The old-fashioned Ten-Weeks Stocks are beautiful, free-flowering, sweet-scented annuals, requiring a mellow soil but otherwise very easy to grow. Sow the seed in April or May and give the plants 12 to 15 inches of space. Pkt. 10 cts., 1/4oz. \$1.25, oz. \$2.50.

Sweet Peas,
Captain Blood

Sweet Peas

Annual

Sweet Peas bloom best in an open, sunny situation. Keeping the flowers picked as fast as they open prolongs the period of bloom. The old-fashioned or Grandiflora type of Sweet Peas are hardy and very floriferous and the flowers are heavily scented, although of only medium size and rather stiff in form. The new Spencer or Waved Sweet Peas are much larger and finer in form as well as colors, but not quite so free-blooming. Modern gardeners and florists as a rule grow only the Spencer varieties. Plant as early as the ground can be worked, in deeply prepared rich soil. Never allow the soil to dry out after the plants appear.

Scott's Summer-flowering Spencers

Distinguished by giant size, often measuring 2 inches in diameter, and by beautifully waved petals. Hundreds of varieties are known to specialists and new sorts are being constantly produced by English and American breeders, but we believe that the varieties we offer comprise the best and most satisfactory of the new as well as old, in all of the favorite colors.

One ounce of seed will plant a row about
15 feet long

Ambition. Rosy lavender.
Avalanche. Glistening white.
Captain Blood. Brilliant scarlet.
Colorado. Bright orange.
Damask Rose. Deep rose.
Flaming June. Scarlet.
Gigantic. Best white.
Gleneagles. Large; pale lavender.
International. Rich mauve.
Magnet. Bright cream-pink.
Mammoth. Orange-scarlet.
Mastercream. Cream.
Mrs. A. Searles. Bright salmon.
Prince of Orange. Deep orange.
Pinkie. Large; rose-pink.
Reflection. Clear blue.
Susan. Blush-pink.
The Admiral. Violet-blue.
The Sultan. Black, velvety maroon.
Welcome. Dazzling scarlet.

All Spencer Sweet Peas, pkt. 10 cts.,
oz. 30 cts., 1/4 lb. \$1, lb. \$3

Sweet Pea Mixture

Scott's Finest Mixed Spencers. A wonderful mixture of finest varieties in many beautiful colors. Pkt. 10 cts., oz. 25 cts., 1/4 lb. 60 cts., lb. \$2.

Scott's Finest Mixed Grandiflora. The old-fashioned, deliciously fragrant kind. Oz. 10 cts., 1/4 lb. 30 cts., lb. \$1.

Sweet William *Dianthus barbatus*

Biennial

A great favorite in all gardens. Easily grown from seed. The flowers are borne in large trusses and are delightfully fragrant. Sow any time from early spring to July. The plants should stand at least 8 inches apart.

Double Varieties, Mixed Colors. The double flowers are very attractive in form as well as colors. Pkt. 10 cts., 1/4 oz. 35 cts., oz. \$1.

Newport Pink, Single. A single variety of a salmon-rose shade. Fine cut-flower. Pkt. 10 cts., 1/4 oz. 35 cts., oz. \$1.

Single Varieties, Mixed Colors. A wide range of colors, many with distinct "eyes" or margins of a different shade. Pkt. 10 cts., 1/4 oz. 25 cts., oz. 75 cts.

Thunbergia • Black-eyed Susan

Annual

A slender climbing or trailing annual with many little flowers, varying from palest primrose to deep buff-yellow, all with dark centers, from which it derives its common name. Start indoors in February or March. Pkt. 10 cts., 1/4 oz. 25 cts., oz. 75 cts.

Tithonia • Mexican Sunflower

Annual

Speciosa. A tall, branching, half-hardy annual with very striking rich orange-scarlet flowers. Fine for clumps in the tall border. Grows 6 feet or more high. Pkt. 15 cts., 1/4 oz. 50 cts., oz. \$1.75.

Verbena

Annual

Low, spreading plants with handsome dark green foliage and great clusters of sweet-scented flowers all summer long. Old favorites for low beds and edging, also for boxes and vases. Sow indoors in February or March.

GRANDIFLORA GIGANTEA HYBRIDS. A showy type with giant flowers in fine heads. The colors are brilliant and stand out against the lovely green foliage. A continuous bloomer from midsummer on.

Beauty of Oxford. Spectacular heads of nice form. The color-range is from rose-pink to rose-red.

Lavender Glory. Large flowers of pure lavender with a creamy white eye.

Royale. Royal blue with a creamy yellow eye.

Salmon-Pink. A fine shade of salmon-pink.

All Grandiflora Gigantea Hybrids, pkt. 15 cts.,
1/4 oz. 75 cts., oz. \$2.50

MAMMOTH HYBRIDS. These varieties produce extra-large flower-heads with individual florets often measuring an inch across.

Auricula-Eyed, Mixed.
Blue Shades.

Defiance. Scarlet.

Italian, Striped, Mixed.

Lucifer. Brilliant scarlet.

Pink and Rose Shades.

White.

Mammoth, Mixed.

All Mammoth Hybrid Verbenas, pkt. 10 cts.,
1/4 oz. 35 cts., oz. \$1

Choice Mixed. Pkt. 10 cts., 1/4 oz. 25 cts.,
oz. 75 cts.

Veronica • Speedwell

Perennial

Spicata. Sturdy plants bearing erect spikes of dark blue flowers in midsummer. A good low perennial about 18 inches tall, useful for garden decoration and cutting. Pkt. 10 cts., 1/4 oz. 75 cts., oz. \$2.25.

Vinca rosea Madagascar Periwinkle

Annual

Forms handsome, bushy bedding plants that bloom profusely all summer from seed sown indoors in February or March, and is fine for pot culture. Height, 1 to 1 1/2 feet.

Finest Mixed. An excellent assortment of Red, White with Rose center, Pure White, and Pink. Pkt. 10 cts., 1/4 oz. 50 cts., oz. \$1.50.

Wallflower

Perennial

The Wallflowers are perennials but in our rigorous climate they require protection over winter and are best carried over in a cold-frame. Sow the seed indoors in March or outdoors late in May and space the plants about 8 inches apart. The flowers are clustered on spikes 1 1/2 feet tall, and are very fragrant.

Double Varieties, Extra-Fine Mixed. Artistic shades of coppery red, bright brown, bronzy yellow, etc. Pkt. 10 cts., 1/4 oz. 75 cts., oz. \$2.

Wild Cucumber Vine

Echinocystis

Annual

Lobata. A very rapid-growing, vigorous climber, often running 30 to 40 feet in a season. It bears small, white, slightly fragrant flowers, followed by spiny seed-pods. Pkt. 10 cts., 1/4 oz. 20 cts., oz. 60 cts.



Verbena, Beauty of Oxford

ZINNIAS • Youth and Old Age

Few flowers provide a more gorgeous display with less care or attention; all they require is a sunny spot to cause them to grow and bloom vigorously from early summer until frost. The seed may be sown in the garden any time during April or May and the plants thinned or transplanted to stand 8 to 18 inches apart, according to variety. The largest specimen blooms are produced on plants that are grown on a mellow, moderately rich soil and given ample room to develop.

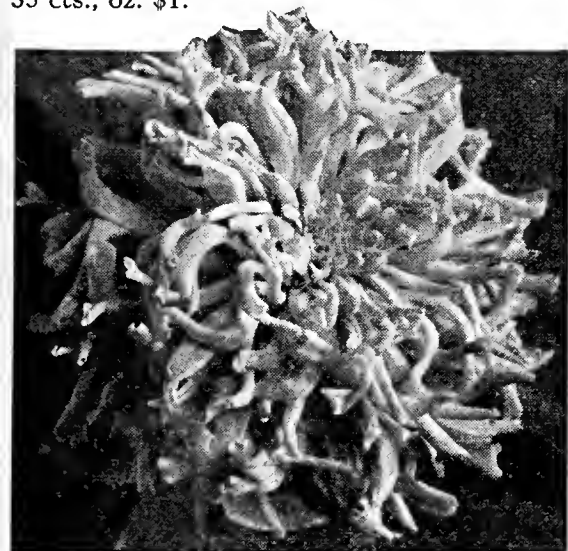
GIANT DOUBLE DAHLIA-FLOWERED VARIETIES. Plants 2½ to 3 feet high, bearing huge, double flowers resembling the Show type of Dahlia.

Crimson Monarch. Deep crimson.
Dream. Deep rosy lavender.
Exquisite. Light rose, deep rose center.
Giant Attraction. Brick-red.
Golden Dawn. Golden yellow.
Illumination. Deep rose.
Oriole. Orange and gold bicolor.
Scarlet Flame. Bright scarlet.

All Giant Double Dahlia-flowered Zinnias, pkt. 15 cts., ¼oz. 40 cts., oz. \$1.25

Finest Mixed. All colors. Pkt. 15 cts., ¼oz. 40 cts., oz. \$1.

ELEGANS, CURLED AND CRESTED. Tall, double flowers with the petals artistically twisted and curled. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.



Zinnia, Fantasy

CHRYSANthemum-FLOWERED

Fantasy, Finest Mixed. All-America Winner. This new chrysanthemum-flowered type has striking and attractive flowers in new and unusual pastel shades. A novelty that has created a sensation wherever shown. Stems long and strong. Pkt. 10 cts., ¼oz. 50 cts., oz. \$1.50.

DOUBLE GIANT VARIETIES. Large, very double flowers, fine for cutting.

Canary-Yellow	Purple
Crimson	Scarlet
Deep Rose	White
Mixed	

Pkt. 10 cts., ¼oz. 35 cts., oz. \$1

DOUBLE MEXICAN HYBRIDS

Haageana, Finest Mixed. Small flowers on low, bushy plants, making a fine display over a long season. Stems are long enough for cutting. An attractive range of colors. Pkt. 15 cts., ¼oz. 40 cts., oz. \$1.25.

DWARF DOUBLE VARIETY. Cut-and-Come-Again. An excellent bedding type not over 2 feet tall. Distinct colors. Finest Mixed. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

POMPON or BABY DWARF VARIETIES. A popular type for cutting. Small, compact flowers on strong-stemmed plants 1½ to 2 feet tall.

Canary Gem	Salmon Gem
Crimson Gem	Scarlet Gem
Lilac Gem	Valencia. Orange.
Purple Gem	Fine Mixed
Rosebud	

All Pompon or Baby Dwarf Zinnias, pkt. 10 cts., ¼oz. 35 cts., oz. \$1

SCABIOSA - FLOWERED, MIXED. Medium-sized flowers like a Scabiosa, with ray petals surrounding a large cushion. Attractive form and range of bright colors. Pkt. 15 cts., ¼oz. 75 cts., oz. \$2.



Double Dahlia-flowered Zinnia

Flower Seed Mixtures Scott's Annual Cut-Flower

Here is a mixture of annuals that we do not hesitate to recommend. Anyone is sure to have success with it, and it provides continuous bloom all summer. Pkt. 10 cts., ¼oz. 25 cts., oz. 45 cts., ¼lb. \$1.50.

Scott's Annual Rock-Garden

A carefully selected assortment suitable for the rockery. Especially useful to fill vacancies. Pkt. 10 cts., ¼oz. 35 cts., oz. \$1.

Scott's Perennial Rock-Garden

A fine collection for permanent plants for the rock-garden. Recommended to the beginner. Pkt. 25 cts., ¼oz. 75 cts., oz. \$2.50.

GARDEN BOOKS

1001 GARDEN QUESTIONS ANSWERED. By Alfred C. Hottes. A guide-book to daily operations, covering the flower-, fruit-, and vegetable-garden. 330 pages; 116 illustrations. Cloth, \$2.

GARDEN GUIDE. A most complete book for the amateur. Written by 28 authors. Covers the entire place from landscaping through the finished garden, both fruit, vegetable, and flower. Chapters on soils, fertilizers, diseases, insects, propagation, transplanting, pruning, winter protection, etc. 576 pages; over 300 illustrations. Cloth, \$2.

LAWNS. By F. F. Rockwell. Shows both how to start a lawn right and how to keep it smooth. 87 pages; 39 illustrations. \$1.25.

THE LAWN. By L. S. Dickinson. 128 pages; illustrated. \$1.25.

SHRUBS. By F. F. Rockwell. 76 pages; 49 illustrations. \$1.25.

THE BOOK OF SHRUBS. By Alfred C. Hottes. 446 pages; 184 illustrations. Cloth, \$3.

THE BOOK OF BULBS. By F. F. Rockwell. Here is the "last word" on bulbs and how to grow them in the garden. Pictures and text show and tell just how to make the most from bulbs in your garden, both outdoors and inside the home. 264 pages; 187 illustrations. \$2.50.

ALL ABOUT FLOWERING BULBS. By T. A. Weston. 186 pages; 8 full-page color-plates; 65 full-page half-tones. Cloth, \$2.

MODERN DAHLIA CULTURE. By W. H. Waite. 134 pages; 6 full-page color-plates and 24 half-tones. Cloth binding, \$1.50.

DAHLIAS. By F. F. Rockwell. It describes the various types and tells their uses, how to plant and grow them, the fertilizers to use, how to control pests, etc. 80 pages; 65 illustrations. \$1.25.

GLADIOLUS. By F. F. Rockwell. 79 pages; 45 illustrations. \$1.25.

ROSES. By F. F. Rockwell. 86 pages; illustrated. \$1.25.

HOW TO GROW ROSES. By McFarland and Pyle. A completely re-written edition of America's most popular rose book. 192 pages; 50 illustrations in color, 40 in black and white, and 62 line drawings. \$1.

CLIMBING ROSES. By G. A. Stevens. A companion volume to "How to Grow Roses." 32 color-plates and 32 half-tone illustrations. Cloth, \$2.

THE BOOK OF ANNUALS. By Alfred C. Hottes. Revised edition, 180 pages; 122 illustrations. Cloth, \$1.50.

PERENNIAL GARDENS. By H. S. Ortloff. 90 pages; 18 illustrations. \$1.25.

THE BOOK OF PERENNIALS. By Alfred C. Hottes. 280 pages; over 100 illustrations. Cloth, \$2.

PEONIES. By F. F. Rockwell. Tells all about peonies, where and how to grow them, their planting, care, cultivation, propagation, and protection. Illustrated with photographs and drawings. \$1.25.

SUCCESS WITH HOUSE PLANTS. By Kift and Hedenberg. 80 pages; 29 illustrations. 75 cts.

WATER GARDENS AND GOLDFISH. By R. V. Sawyer and E. H. Perkins. 272 pages; 126 illustrations. Cloth, \$2.

ROCK-GARDEN PRIMER. By Archie Thornton. 152 pages; 4 color-plates and 70 other illustrations. Leatherette, \$2.

ROCK-GARDENS. By F. F. Rockwell. Shows just how you can build a rock-garden yourself, on a small or large scale, and at little expense. Let this practical book demonstrate the fascination of this form of gardening and guide you to success. 86 pages; 31 illustrations. \$1.25.

EVERGREENS FOR THE SMALL PLACE. By F. F. Rockwell. All the information you need to make the best use of evergreens is in this handy book. 84 pages; 67 illustrations. \$1.25.

THE OUTDOOR LIVING-ROOM. By L. W. Ramsey and C. H. Lawrence. 139 pages; 98 illustrations. \$2.50.

THE GARDEN NOTEBOOK. By Alfred Putz. Illustrated handbook of home-gardening for each week of the year. 52 working drawings show just what to do, and how. 212 pages. \$1.60.

PLANT PROPAGATION. By Alfred C. Hottes. Easily understood by the amateur but covers propagation by all the approved commercial methods. 238 pages; 136 illustrations. Cloth, \$2.

AROUND THE YEAR IN THE GARDEN. By F. F. Rockwell. It starts with preparations for the season's work in January and outlines a balanced program for the garden through every week in the year. 350 pages; 88 illustrations. \$3.

GARDENER'S HANDBOOK. By L. H. Bailey. Comprises brief notes for the amateur on the raising of vegetables and fruits and the growing of many kinds of annuals and perennials in the home-grounds. Arranged alphabetically. \$3.

PRACTICAL VEGETABLE CULTURE. By Albert E. Wilkinson. Useful for both amateur and professional. 308 pages; 135 illustrations. \$2.

MANUAL OF GARDENING. By L. H. Bailey. 539 pages; 350 illus. \$3.

GARDEN FLOWERS IN COLOR. By G. A. Stevens. It has 400 flower pictures in full color. There is a picture on every page, and the brief cultural directions are directly opposite the illustrated flower. 320 pages; 400 photographs in color. \$1.98.

If the book you are wanting is not listed, give us the subject and we will be glad to tell you what is available, and the price

SUMMER-FLOWERING BULBS

All Bulbs Sent Postpaid at Prices Quoted



Anemone, St. Brigid

Anemone • Windflower

Suitable for pot or border culture and for massing. Soak bulbs 24 hours before planting.

Blue Poppy. A newer variety of a sky-blue color.

De Caen. A very large-flowered, single strain of unique beauty. All colors.

Hollandia. Rich crimson flowers from June until frost.

St. Brigid. Very large, vivid flowers of scarlet, pink, purple, etc.

All Anemones, 10 cts. each, \$1 per doz., \$7 per 100

Begonias, Tuberous-rooted

These plants grow from hard, crooked bulbs, like flat potatoes, hollowed on one side. In planting, be sure that the hollow side is up. They make strong, fleshy stems a foot or more high, with big, bristly, very beautiful leaves, crowned by flowers of enormous size and almost unbelievable brilliance. Blooms 4½ to 5 inches across are not unusual. They should be started in pots or pans indoors in February or March, and transplanted to the garden about the time that corn is growing well. They may also be started outdoors at the same time but will bloom later. Separate colors: **Single varieties**, white, scarlet, pink, or yellow flowers; **Double varieties**, red, salmon, rose, or orange flowers. All varieties, 25 cts. each, \$2.50 per doz., \$16 per 100.

Gloxinia

Beautiful velvety flowers of trumpet shape produced by tender, tropical bulbs which may be grown in pots or greenhouse benches. The large foliage is covered with plush-like hairs, and should not be wet. Keep them warm at all times.

Crimson
Mottled
Rose

Violet
White
Mixed Colors

All Gloxinias, 45 cts. each, \$4.50 per doz., \$32 per 100

Caladium esculentum

Elephant's Ear

For imposing masses of tropical foliage there is nothing so effective or so easily grown as the Elephant's Ear. The plants grow from 3 to 5 feet high. Plant the bulbs late in May, after all danger from frost is past, spacing them 2 to 4 feet apart and covering them a few inches deep. The larger the bulb, the larger the plant and the more space required. If extra-large plants are desired, start the bulbs indoors in pots or large boxes, in March or early April, and transplant to the open about June 1. Give plenty of water throughout the season; liquid manure is very beneficial.

	Each	Doz.	100
5 to 7-in. circ....	\$0 05	\$0 50	\$3 50
7 to 9-in. circ....	10	1 00	7 00
9 to 11-in. circ....	15	1 50	10 00
11 to 13-in. circ....	25	2 75	20 00
13 to 15-in. circ....	40	4 00	30 00

Hyacinthus candicans

Summer Hyacinth

Tall spikes with scores of drooping, bell-shaped white flowers in midsummer. Very attractive and unusual. Handle like gladiolus. 15 cts. each, \$1.50 per doz., \$10 per 100.

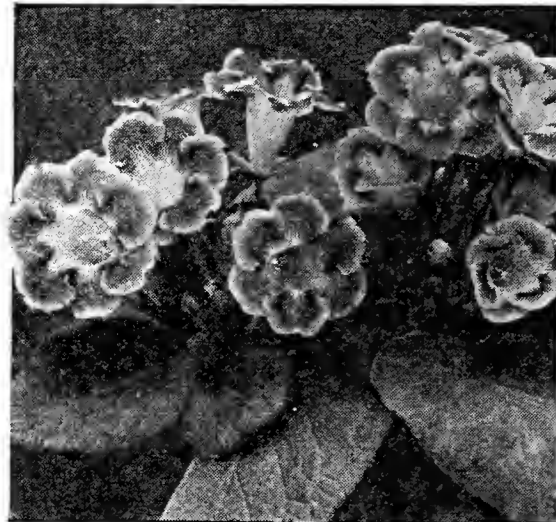
Ismene calathina

Peruvian Daffodil

Enormous, richly fragrant white flowers of the amaryllis type, curiously cupped and most attractive. Grow in warm, sunny soil and treat like gladiolus, except that they cannot be set out until corn is growing outdoors, and the bulbs should be kept warm in winter. 35 cts. each, \$3.50 per doz.



Tuberous-rooted Begonias



Gloxinia

Montbretia

Star-shaped flowers in beautiful colors, including scarlet, yellow, apricot, blotched and spotted. They often measure 4 inches across, and are borne in clusters on long stems 3 to 4 feet high.

Mixed colors. 10 cts. each, \$1 per doz., \$7 per 100.

Summer-blooming Oxalis

Charming low, bushy plants for growing in pots or borders, with clover-like leaves and round, cheerful flowers of various shades of pink and crimson which close at night. Continue in bloom for many weeks. 10 bulbs 20 cts., \$1.75 per 100.

Ranunculus

Finest Mixed. Fine, brilliantly colored, double flowers on stems over a foot long for cutting. Double and semi-double, and produced in abundance. 10 cts. each, \$1 per doz., \$7 per 100.

Tigridia

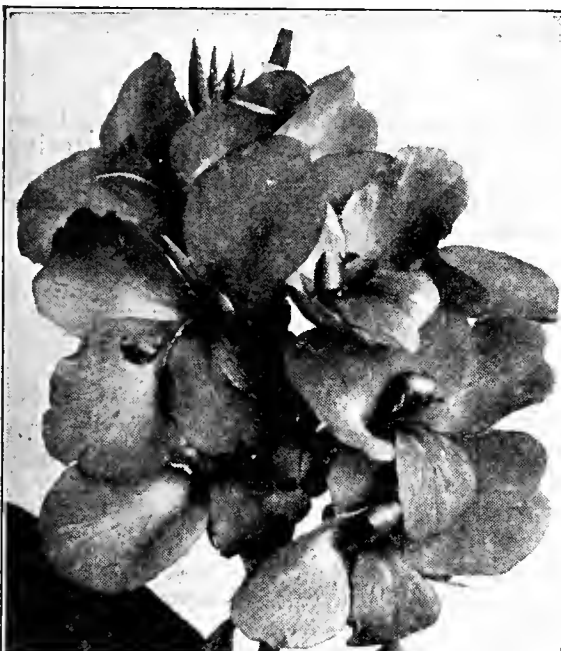
One of the most spectacular flowers grown in gardens. The 5- to 6-inch triangular blooms have three long petals of yellow, orange, white, flesh-pink, or red, and three short petals forming a shallow cup filled with spots, stains, and blotches of red. They last only a day but they continue coming from July until September. Mixed colors, extra-large bulbs, 10 cts. each, \$1 per doz., \$7 per 100.

Tuberose

Old-fashioned flowers valued for their fragrance. Start the bulbs indoors in March and transplant to the open in early May.

White Pearl. The best variety. Flowers creamy white, large, and double.

	Each	Doz.	100
First-Size Bulbs...	\$0 05	\$0 50	\$3 25
Mammoth Bulbs...	10	1 00	7 00



Canna

Cannas

The modern Cannas with their splendid foliage and large, gorgeously colored flowers surpass all other plants for massive beds and heavy borders. They are very easy to grow, thriving best in a sunny, well-drained spot. For extra-large plants and heavy foliage effects, the soil should be well manured.

Ambassador. Brilliant cherry-red flowers of immense size. Foliage and stalks bronze. Height 4 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Crimson Bedder. Foliage dark green; flowers deep blood-red. Height 3 feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

Eureka. The best white-flowering Canna for bedding. Height 4½ feet. 10 cts. each, \$1 per doz., \$7 per 100.

Fiery Cross. Big, substantial carmine-red flowers and beautiful bluish green foliage. Height 4 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Florence Vaughan. Flowers yellow with red spots; leaves light green. Height 4½ feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

King Humbert. On account of its rich purplish bronze foliage, one of the most handsome. Flowers orange-scarlet, freely produced for a long season. Height 4½ feet. 10 cts. each, \$1 per doz., \$7 per 100.

Meteor. The broad-petaled flowers are dazzling crimson and are carried in big clusters. Foliage deep green. Vigorous and blooms for a long season. Height 5 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Mrs. Alfred Conard. Rich salmon-pink flowers of great size and substance come in enormous clusters. The finest bedding Canna of its color. 12 cts. each, \$1.25 per doz., \$9 per 100.

Shenandoah. Flowers salmon-pink, borne in large clusters; foliage rich ruby-red. Height 4 feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

Statue of Liberty. Flowers blazing flame-red. The foliage is of a rich, luxuriant bronzy shade. The leaves are larger than any Canna we know. Height 6 to 7 feet. 10 cts. each, \$1 per doz., \$7 per 100.

The President. Enormous glowing scarlet flowers of wonderful substance borne erect on strong stems; luxuriant deep green foliage. Blooms continuously from midsummer until frost. Height 4 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Queen Charlotte. Rich pomegranate-red flowers bordered with golden yellow. Height 3½ feet. 8 cts. each, 90 cts. per doz., \$6 per 100.

Wintzer's Colossal. Remarkable for its exceptionally large, broad-petaled flowers, often measuring 8 inches across. Deep scarlet with light green foliage. Height 5 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Yellow King Humbert. A large-flowered yellow variety, popular for tall beds. Flowers deep yellow, blotched with red; leaves dark green. Height 5 feet. 10 cts. each, \$1 per doz., \$7 per 100.

Hardy Lilies

Showy garden flowers of the utmost beauty and stateliness, which are enormously popular just now. Plant them 6 to 8 inches deep and as early as possible in well-drained unfertilized soil, and let them alone.

Auratum (Gold-banded Lily). White flowers of enormous size with crimson spots and golden stripes produced in August. 35 cts. each, \$3.50 per doz.

Henryi. The flower-stalk, 3 to 5 feet high, carries numerous flowers, each a rich apricot-yellow spotted with brown. 35 cts. each, \$3.50 per doz.

Regale (The Royal Lily). Enormous, trumpet-shaped flowers, with waxen white



Lilium auratum

petals suffused with gold inside and stained with purple outside; fragrant. It is very hardy and does well in almost any situation, growing 2 to 4 feet high and bearing its blooms in a whorl at the top. 35 cts. each, \$3.50 per doz.

Speciosum album. Pure white. 50 cts. each, \$5 per doz.

Speciosum rubrum. White, shaded with deep rose and spotted red. 35 cts. each, \$3.50 per doz.

Tigrinum splendens (Tiger Lily). A larger and more prolific flowering form of the old-fashioned Tiger Lily. It grows 4 to 6 feet tall, bearing an immense cluster of showy orange-red and brown flowers, which last for weeks. Very easy to grow, and increases year by year in beauty and size. 25 cts. each, \$2.50 per doz.



Pond and Marsh Plants

Hardy Water-Lilies

	Each ppd.
Blue Beauty. (Tropical.) Day blooming. Glorious rich blue....	\$2 50
Chromatella. Rich canary-yellow.	2 00
Comanche. Sunset shade.....	2 25
General Pershing. Day blooming. Light pink.....	1 75
Gladstone. Pure white; large....	1 75
Gloriosa. Red. Very free bloomer.	2 50
Helen Fowler. Deep pink.....	1 50
Panama-Pacific. (Tropical.) Day blooming. Purple.....	2 50

Marsh- or Bog-Plants

Blue Flag	\$1.00 for 3
Giant Arrowhead50 for 3
Graceful Cattail50 for 2
Parrot Feather25 for 2
Pickerel Rush50 for 3
Primrose Creeper50 for 3
Umbrella Palm	1.00 for 3
Variegated Sweet Flag	1.00 for 3
Water Hyacinth50 for 3
Water Poppy50 for 3
Yellow Flag	1.00 for 3

GLADIOLUS

Few Flowers are more lovely or easier to grow

There are few flowers to compare with the Gladiolus for all-round usefulness in the home-garden—and few flowers are more lovely or easier to grow. Their graceful form, attractive colors, and characteristic markings have given them the popular name of "Garden Orchids." Plant the bulbs any time after mid-April up to the end of June, setting them about 4 inches deep and 6

inches apart. For a constant supply of flowers for cutting from August to frost, make plantings every week or ten days during the spring. The varieties we offer are the choicest in their color-range, and you will not be disappointed by any of them. Our bulbs average 1½ inches and over in diameter, which is considered the very best flowering size.

5 cts. each, 50 cts. per doz., \$3.50 per 100, except as noted



Red Shades

Commander Koehl. *New.* Dark scarlet-red without markings or blotches. Extra-large spikes. 10 cts. each, \$1 per doz., \$7 per 100.

Crimson Glow. Glowing, velvety crimson, shaded deeper in the center. Tall, strong grower.

Dr. F. E. Bennett. Peach-red, overlaid with flame-scarlet; throat speckled ruby and creamy white. Sturdy grower.

Mrs. Francis King. Flame-red, shaded salmon toward throat. Tall, strong spike.

Red Glory. A gorgeous dark red sport of the famous Purple Glory. It is a deep, glowing color, full of fire and latent charm. 8 cts. each, 85 cts. per doz., \$6 per 100.

Scarlet Wonder. Pure deep scarlet. Mammoth flowers, many open at a time on tall, stiff stems. 7 cts. each, 75 cts. per doz., \$5 per 100.

Virginia. Large, massive, flaming scarlet flowers, making a gorgeous display of dazzling red.

Wurtembergia. *New.* Lovely scarlet with broad, soft creamy blotch. Extra-large spike. 15 cts. each, \$1.50 per doz.

Pink Shades

Betty Nuthall. Flower-spikes long and graceful. Warm coral-pink, with pale orange throat. 7 cts. each, 75 cts. per doz., \$5 per 100.

Evelyn Kirtland. Very warm rose-pink, deeper at the edges, shading towards shell-pink in the center; brilliant scarlet blotches on the lower petals.

Giant Nymph. Light rose-pink, with creamy yellow throat. Grows 6 feet tall.

Gloriana. Finest golden salmon, with pure yellow throat. Very free blooming. 7 cts. each, 75 cts. per doz., \$5 per 100.

Longfellow. Clear La France-pink. Tall, slender spike of large, wide-open flowers. 8 cts. each, 85 cts. per doz., \$6 per 100.

PINK SHADES, continued

Los Angeles. Beautiful shrimp-pink, glowing orange-carmine blotch in throat. Good forcing variety.

Mildred Louise. *New.* Clear light strawberry-salmon, blending to yellow in throat. Extra-large spike. 15 cts. each, \$1.50 per doz.

Mrs. Frank Pendleton. Deep rose-pink, shading to pale pink in throat; large, bright crimson blotches on lower petals.

Mrs. H. E. Bothin. Geranium-pink, tinted salmon; flaming scarlet center.

Mrs. Leon Douglas. Begonia-rose, striped with flame-scarlet; lower petal pale lemon, speckled ruby. Considered one of the largest Glads in existence.

Mrs. P. W. Sisson. Very handsome pale salmon-pink variety of a most soft and appealing shade. Highly regarded as a cut-flower by amateur growers. 8 cts. each, 85 cts. per doz., \$6 per 100.

Mr. W. H. Phipps. La France-pink, overlaid with salmon-rose. Enormous flowers. A real Super Glad.

1910 Rose. Pure deep rose-pink, with white center lines on lower petals.

Odin. Dark salmon with intense carmine blotch.

Picardy. One of the best of the new Glads. The blooms are large, slightly ruffled, and a charming apricot-pink color. 10 cts. each, \$1 per doz., \$7 per 100.

Tyrian Beauty. Pure Tyrian-rose, upper petals a shade lighter. Very attractive. 7 cts. each, 75 cts. per doz., \$5 per 100.

Orange Shades

Herbstzauber. Beautiful warm salmon-copper. Tall; late flowering. 8 cts. each, 85 cts. per doz., \$6 per 100.

Nancy Hanks. Rich apricot to orange-pink, with grenadine tongue. Stands the hottest sun. 7 cts. each, 75 cts. per doz., \$5 per 100.

Orange Queen. (Prim.) Purest apricot of a very warm tint. Considered one of the choicest Grandiflora Primulinus.

Yellow Shades

Gold Eagle. Pure, bright yellow. Bears up to 15 florets on the spike.

Golden Dream. Pure golden yellow. An excellent variety for cut-flowers. 7 cts. each, 75 cts. per doz., \$5 per 100.

Golden Measure. Pure golden yellow. Very large flowers of good substance.

Souvenir. (Prim.) Pure golden yellow. Typically hooded flowers.

Yellow Wonder. Buttercup-yellow, slightly deeper in the throat, without markings. 7 cts. each, 75 cts. per doz., \$5 per 100.

Smoky Shades

Marmora. Lavender-gray, with petunia-colored blotch. Ten to twelve very large flowers open at once. 8 cts. each, 85 cts. per doz., \$6 per 100.

Mother Machree. Large, smoky lavender flowers, the result of a blending of lavender and orange, subdued with neutral gray. Very beautiful but hard to describe. 10 cts. each, \$1 per doz., \$7 per 100.

Rose Ash. Old-rose, overlaid and blended with pink, blue, and red, giving the color of ashes of roses, hence its name.

Blue and Lavender Shades

Aida. Very deep blue with reddish blotch. 10 cts. each, \$1 per doz., \$7 per 100.

Captain Boynton. Beautiful lavender, with deeper blotch on lower petals. An excellent variety.

Dr. Moody. Rich deep lavender, with fine penciling of darker shade in throat. 8 cts. each, 85 cts. per doz., \$6 per 100.

Minuet. Beautiful clear, light lavender. This is the lavender by which all other lavenders are judged. 8 cts. each, 85 cts. per doz., \$6 per 100.

Mrs. F. C. Peters. Very beautiful orchid-lavender with soft crimson blotch bordering white on lower petals. 10 cts. each, \$1 per doz., \$7 per 100.

Mrs. Van Konynenburg. Matchless aniline-blue. Without a doubt the best blue variety. Grows very tall. 8 cts. each, 85 cts. per doz., \$6 per 100.

Purple Shades

Charles Dickens. Purple-violet. A very good grower and choice variety. 8 cts. each, 85 cts. per doz., \$6 per 100.

Purple Glory. Velvety maroon with almost black blotches. Large, ruffled flowers.

White Shades

Maid of Orleans. *New.* Creamy white with light cream shade in throat. Extra-large flower. 12 cts. each, \$1.25 per doz.

Peace. Pure white, with lilac feathering on lower petals. Good for late blooming.

SCOTT'S EXHIBITION MIXTURE. An excellent mixture of show or exhibition varieties in many attractive colors. It is an outstanding assortment and sure to please any lover of Gladiolus. 5 cts. each, 50 cts. per doz., \$3.50 per 100.

SCOTT'S GARDEN MIXTURE. This mixture of standard varieties in many beautiful colors will make an excellent showing in the garden or for cut-flowers. Large, healthy bulbs, 4 cts. each, 35 cts. per doz., \$2.50 per 100.

Dahlias

It is doubtful if there are any flowers that afford as much general satisfaction as Dahlias. The ease with which they can be grown in any sunny situation, their freedom from pests and blights, their endless variety of color, size, and form, and their great usefulness for cutting as well as garden decoration insure them a permanent place in popular favor, while their low cost makes it easy for everyone to start a collection which can be added to year after year. The roots or tubers should be planted about 4 inches deep in well-dug soil during May or June. Allow at least 2 feet of space between plants. Trim out all but the strongest two or three shoots and when these are about 4 feet

high pinch off the tips to encourage branching. If extra-large exhibition blooms are wanted, remove all but one or two of the top buds on each stem. Tall plants should be tied to stakes for support. Dig roots when frost has killed the foliage in the fall, and store in sand or soil in a cool but frost-proof cellar.

The Cactus Dahlias are distinguished by narrow, quilled petals which are often curved and twisted in various forms. Decorative Dahlias include the old-fashioned formal and rather stiff show or "ball" Dahlias, and the newer broad-petaled types of enormous size.

In the following list, C indicates Cactus; D, Decorative; P, Pompon

A. D. Livoni. (D.) Rich seashell-pink. 30 cts. each, \$3 per doz.

Admiral Dot. (D.) Light pink. 75 cts. each, \$7.50 per doz.

Avalon. (D.) Clear yellow. 75 cts. each, \$7.50 per doz.

Chemar's Eureka. (C.) White, slightly tinted pale mauve. 50 cts. each, \$5 per doz.

Garden Glow. (C.) Orange-red and chrome-yellow. 75 cts. each, \$7.50 per doz.

Indian Chief. Deep rich crimson; long stems. 75 cts. each, \$7.50 per doz.

Jane Cowl. (D.) A warm buff and old-gold bloom, with broad, slightly twisted or waved petals. 75 cts. each, \$7.50 per doz.

Jean Kerr. (D.) Pure white. 50 cts. each, \$5 per doz.

Jersey's Beauty. (D.) Perfect flowers of an ideal shade of pink, with long, handsome stems making it splendid for cut-flower use. A free, early bloomer with exceptional keeping qualities. 50 cts. each, \$5 per doz.

Kathleen Norris. (D.) True pink. 75 cts. each, \$7.50 per doz.

Mrs. I. de ver Warner. (D.) A clear bright lilac-rose, beautifully formed. 75 cts. each, \$7.50 per doz.

Patrick O'Mara. (D.) Flowers 8 inches or more in diameter, and borne on long, stiff stems. They are firmly set at right angles, close to stem. Soft and pleasing shade of orange-buff, slightly tinged with Neyron rose. 50 cts. each, \$5 per doz.

Quota. (D.) A clear, clean white of very good quality. Long, stiff stems. 50 cts. each, \$5 per doz.

Red Planet. (D.) Attractive cerise-red, suffused yellow. Fine for exhibition and garden. 50 cts. each, \$5 per doz.

Rose Fallon. (D.) Deep mahogany-bronze. A wonderful flower of enormous size. 75 cts. each, \$7.50 per doz.

Sagamore. (D.) This is a wonderful variety with good keeping qualities and of uniform large size. Color, amber-gold, shaded with a warm salmon-rose and orange-buff. An open, strong grower with erect stems. 50 cts. each, \$5 per doz.

Salem Pride. (D.) Reddish violet, suffused, streaked, and lightly tipped white. Flowers are large and deep on good stems. 75 cts. each, \$7.50 per doz.

Snow Clad. (P.) White. Blooms profusely. 75 cts. each, \$7.50 per doz.

Prices given are postpaid. Half-dozen roots, any assortment of varieties, at dozen rates



Cactus Dahlias

Peonies

Peonies are among the most gorgeous plants that can be grown in a garden. Given a deep, rich soil and a sunny situation they will thrive anywhere. A mulch of manure each fall will help to maintain them. Plant the roots so that the eyes will be about

½ inch below the surface of the ground. Strong divisions with 3 to 5 eyes, and plenty of roots, and larger size than usually offered.

Price, 50 cts. each, \$5 per doz., except where noted

Alexandre Dumas. Creamy white collar with light violet-rose crown. Blooms early and freely and is of medium height.

Augustin d'Hour. A brilliant dark red with a silvery reflex. Medium tall plant blooming freely in midseason.

Avalanche. Milk-white with a cream-white collar and center of lilac-white; carmine spots mark the petals.

Felix Crousse. Flame-red. Large, bomb-shaped. Late midseason.

Festiva Maxima. White; very large, globular. Still one of the best. Early.

Germaine Bigot. Very large, compact blooms. Pale lilac-rose with center petals flecked crimson. Midseason.

Karl Rosenfield. Dark crimson, very brilliant and striking in color. Blooms are of semi-rose type. Midseason.

Marie Crousse. Globe-shaped blooms rather loose in form. Color pale lilac-rose. Plants tall and free blooming. Midseason.

Mikado. Beautiful dark rose-red, edged and tipped pale buff-yellow. Considered one of the best red Japanese varieties.

Mme. Ducl. Light mauve-rose with a silvery reflex. Globe-shaped blooms, slightly fragrant. An extra-fine variety.

Mons. Jules Elie. A large flower with a high crown. Color pale lilac-rose, with an amber-yellow collar; fragrant. Early.

Oki-no-nami. Attractive pink Japanese variety.

President Roosevelt. Deep, rich, brilliant red. Blooms semi-rose type, opening midseason. 75 cts. each.

President Taft. Bold, handsome, flat, pink flower. Midseason. 75 cts. each.

Primevere. Guard petals creamy white, center petals light sulphury yellow. Most desirable of the so-called yellow Peonies. Midseason. 75 cts. each.

Princess Beatrice. Guard and crown petals violet-rose; collar creamy white with crimson flecks. An extra-good variety blooming in midseason.

PEONIES BY COLOR. Strong-growing plants of selected varieties. Named to color, red, white, or pink. 25 cts. each, \$2.50 per doz.



President Roosevelt Peonies



The Queen of Flowers

The Rose has been for thousands of years the queen of flowers, and no garden can be complete without representatives of the different types of these lovely flowers. We list here only the best varieties of the different classes of Roses, in a quality of plant which will give the best service to our customer.

For exhibition and cut-flower purposes, the Hybrid Teas are

unsurpassed. For a sheer mass of color in the garden there is nothing like the Polyanthas. The Hybrid Perpetuals will give you quantities of large, fragrant flowers in June. Climbing Roses can serve many purposes, and every garden should have a few of the old Moss Roses and that splendid shrub Rose, *Rosa Hugonis*.

Hybrid Tea Roses

These popular flowers are crosses between the fragrant and hardy Hybrid Perpetuals and the old tender Tea Roses. They give quantities of bloom of cut-flower quality on plants which are hardy with a little protection during the winter.

They begin blooming in late May or early June, depending on the locality, and if given plenty of water, occasional applications of fertilizer, and are kept sprayed or dusted so that the foliage is free of disease or insects, will bloom practically continuously until stopped by frosts. Book of Rose culture free with every order when requested.

All of the Roses we offer are No. 1 grade, 2-year-old, hardy, northern, field-grown plants.

Red Varieties

Ami Quinard. One of the darkest Roses in existence. Velvety crimson-maroon with a soft black luster. Averages 17 petals. Carries the real old Rose fragrance. Strong-growing plants. \$1 each.



Ami Quinard

Cathrine Kordes. A nicely formed, high-centered Rose of scarlet-red. The plants are very strong, and unusually free-blooming. 85 cts. each.

E. G. Hill. Gorgeous dark crimson-scarlet blooms full of delicately curled petals; intensely fragrant. Plants grow well and produce an unusual number of splendid flowers. 75 cts. each.

Etoile de Hollande. The best red Rose for garden use. Its flowers are gigantic, beautifully frilled, fragrant, and the color is deep, glowing crimson which does not fade. 85 cts. each.

Gruss an Teplitz. One of the most useful and dependable Roses. Beautiful, clear crimson-scarlet, fragrant flowers, profusely borne till frost. Most desirable for bedding and a good hedge. 65 cts. each.

Margaret McGredy. A cup-shaped bud opens into a vivid scarlet bloom which later turns to brick-red or scarlet-orange. A desirable double variety. 75 cts. each.

Matador. Plant Patent No. 170. The blooms are large, well formed, scarlet-crimson with darker sheen on the reverse of the petals. \$1.25 each.

McGredy's Scarlet. An excellent garden Rose which is a nice shade of red, instead of scarlet, as the name would indicate. Flowers are freely produced on very vigorous, healthy plants. 85 cts. each.

National Flower Guild. A little too tall for the ordinary Rose-bed, this Rose fits in nicely in shrubbery plantings. Flowers very large, of good form, double, and a rich shade of dark red. They are freely produced all during the season. 75 cts. each.

Prince Felix (de Luxembourg). A huge flower of brilliant scarlet-red and fine form. Tall, healthy plant of unusual hardness. 85 cts. each.

Red Radiance. A sport of Radiance and equally good, differing only in the beautiful deep red color of the large globular flowers. Very hardy and of the greatest garden value. Fine fragrance. 75 cts. each.

Rouge Mallerin. Splendidly formed flowers of glowing scarlet. The petals

have a velvety finish which seems to radiate fire. Plants are upright and close growing. One of the finest red Roses for cutting. 85 cts. each.

Texas Centennial. Plant Patent No. 162. A sport of President Herbert Hoover, exactly like its parent in plant and shape of flower. The color, however, is vermilion-red with a touch of gold at the base of the petals. Flowers age a deep shade of pink. \$1 each.

Pink Varieties

Briarcliff. A nice sport of Columbia. One of the best varieties for cut-flowers. Color is a nice clean shade of rose-pink. Flowers are perfectly formed and very fragrant. 75 cts. each.

Dame Edith Helen. One of the most remarkable Roses in the world for its giant size, multiplicity of well-placed petals, and its sparkling, pure pink color. Very handsome and in great demand. 85 cts. each.

Editor McFarland. The best of the dark pink Roses, with finely formed, deep rose-pink flowers. These are freely produced on good cutting stems on a vigorous, branching plant which blooms all the time. 85 cts. each.

Gloaming. Plant Patent No. 137. Lovely cut-flower quality blooms of a warm shade of salmon-pink. Flowers are large. Plant is very strong and blooms freely throughout the season. \$1.25 each.

McGredy's Pink. Plant Patent rights reserved. Unusually large branching plants with heavy bronzy foliage produce quantities of large, double, pearly cream and pink flowers with a saffron base. Sweetly scented. \$1.50 each.

Radiance. Large, strongly fragrant, light silvery pink to salmon-pink flowers, borne profusely all summer on long, strong stems. 75 cts. each.

Warrawee. Plant Patent No. 140. Long-pointed, salmon-pink buds open to large flowers of exquisite shell-pink with a darker reverse. Has the spicy fragrance of the old clove pinks. Splendid, healthy plants blooming continuously. One of the best of all garden Roses. \$1 each.

Yellow Varieties

Eclipse. Plant Patent No. 172. The longest, slenderest yellow bud to be found among garden Roses. Open flowers are large, loosely formed, of rich golden yellow without shading. This Rose will be popular for its buds alone. \$1.50 each.

Feu Pernet-Ducher. Plant Patent No. 103. One of the most beautiful of the yellow Roses. At times the outside petals are almost white, but the heart of the flower is a rich golden yellow. Blooms continuously. \$1.25 each.

Golden Dawn. One of the best garden Roses, with large, very double and very fragrant flowers of pale straw-yellow. The plants are low but spreading, with beautiful foliage. 85 cts. each.

Goldenes Mainz. Plant Patent No. 254. The deepest yellow of all the garden Roses. The rich dandelion-yellow flowers are quite large, loosely formed, but produced in amazing quantities. Plants are tall and branching. \$1.50 each.

Max Krause. New golden yellow Rose of great depth and substance, originated in Germany where it has won many honors at flower shows. Blooms freely on long stems. \$1 each.

Mrs. Erskine Pembroke Thom. Best of the clear unshaded yellow Roses. Flowers well shaped, of medium size, and richly yellow. Fine foliage and growth vigorous. Free flowering. 85 cts. each.

Mrs. Pierre S. du Pont. A deep yellow Rose that shows no signs of fading. Good foliage and a prolific bloomer. 75 cts. each.

Roslyn. Remarkable for the large size and perfect form of its clear sunflower-yellow blooms. Plant grows well and produces perfect flowers. 65 cts. each.

Sir Henry Segrave. Yellow buds open to perfectly formed, double flowers of pale lemon-yellow. It has a distinct lemon fragrance. Plants are of average height and unusually free in bloom. 85 cts. each.



Mme. Cochet-Cochet

Sœur Therese. Slender yellow buds marked with carmine open to fragrant daffodil-yellow flowers. The plants are large, producing quantities of lovely buds for cutting. 85 cts. each.

Bicolor Varieties

Alezane. Plant Patent No. 116. A reddish brown bud opens into a rich apricot bloom, veined with yellow. A very interesting color which has attracted a great deal of attention. A vigorous, upright grower with dark green foliage. Starts blooming very early. \$1.25 each.

Amelia Earhart. Plant Patent No. 63. Large, long-pointed buds and very large, well-formed flowers of golden yellow, deeper at center, with orange sheen; very fragrant. Long, strong stems. Continuous bloomer. A Gold Medal Rose. \$1.25 each.

Carillon. Plant Patent No. 136. Low-growing, branching plants covered with large flowers of gorgeous coral-flame. A bed of this is a spectacle one never forgets. Considered an improved Mme. Edouard Herriot. \$1 each.

Condesa de Sagasto. One of the most popular of the bicolored Roses. The flowers are a good size, cupped, burning copper inside and deep yellow on the reverse of the petals. It is fragrant and unusually free blooming. \$1 each.

Countess Vandal. Plant Patent No. 38. Stunning new Rose of coppery pink, strongly tinted with ruddy shades in the bud, opening to big, handsomely shaped flowers of striking color. \$1 each.

Edith Nellie Perkins. One of the finest of the two-tone pink Roses, with rosy carmine on the reverse of the petals and salmon inside, all overspread with a thin golden sheen. Splendid plants, blooming freely. 85 cts. each.

Federico Casas. Large, richly colored flowers, coppery pink inside and orange on the reverse. The plants are upright and bloom freely. 85 cts. each.

Heinrich Wendland. One of the most spectacular of all Roses, with fragrant, unfading flowers of nasturtium-red, with a deep golden yellow reverse. \$1 each.

Hinrich Gaede. Probably the most spectacular of all the "fancy" Roses. Blooms are burnt-orange with vermilion tints, and they retain their coloring better than most of this type. Plants are bushy, with beautiful foliage, and bloom very freely. \$1.25 each.

McGredy's Triumph. Plant Patent No. 190. Bright carmine with shades of gold which deepen toward the base of petals. Blooms are large and full. \$1.50 each.

Mme. Cochet-Cochet. Plant Patent No. 129. Strong plants that are very free with their shapely flowers of coppery pink warmed with orange. \$1 each.

Mme. Joseph Perraud. Large, shapely flowers of nasturtium-buff, shading to shell-pink at the edges. Sweetly fragrant. One of the most beautiful Roses we have ever seen. Strong growth and unusual freedom of bloom. \$1.50 each.



R. M. S. Queen Mary

Mrs. Sam McGredy. A Gold Medal winner from the north of Ireland, with astonishing buds and flowers of glowing orange-salmon and coppery gold. One of the best of the new varieties. \$1 each.

President Herbert Hoover. Enormous flowers of ever-changing color. Deep copper-red in bud, golden in the center, with deep pink outer petals. In autumn it is superb. Plants very strong, with good foliage, blooming early and often. 85 cts. each.

President Plumecocq. Large, cupped flowers of coppery buff, slightly overspread with salmon, long lasting and fragrant. Splendid plants. 85 cts. each.

R. M. S. Queen Mary. Plant Patent No. 249. The lovely flowers of this novelty are salmon-pink suffused with orange, a warm color which is pleasing both in the garden and under artificial light when it is used as a cut-flower. Plants are of average height, but very bushy and are unusually free in their bloom. \$2 each.

Signora. Plant Patent No. 201. A great new Rose of fine form on long stems. Deep orange, heavily veined carmine, edges of petals brick-orange. Fruit fragrance. 45 petals. \$1.50 each.

White Varieties

Kaiserin Auguste Viktoria. This old Rose is the finest of all the whites. It has form, fragrance, and is fully double. Plants are of average height and bloom. 85 cts. each.

Mme. Jules Bouche. Pure white, medium-sized blooms that are very beautiful. Plants grow rather tall, branch freely, and carry many flowers. 85 cts. each.

Rex Anderson. Plant Patent rights reserved. A beautiful exhibition flower which opens cream but soon turns to pure white. Plants are of medium size. One of the finest of the white Roses. \$1.50 each.

QUANTITY PRICES. All 65-ct. varieties, \$6.50 per doz.; 75-ct. varieties, \$7.50 per doz.; 85-ct. varieties, \$8.50 per doz.; \$1 varieties, \$10 per doz. Half-dozen plants, any assortment of varieties, at dozen rates. *These prices do not apply to patented Roses. Postage extra. See page 46.*



Rose, Doubloons

Climbing Roses

The modern Climbing Rose is one of the most adaptable and most satisfactory flowering plants that we have in our gardens. There are so many types to choose from, from the lovely old Ramblers which when in bloom are one mass of thousands of beautiful flowers, to the very latest large-flowered climbers, with blooms of cut-flower quality; in fact, many of them have larger and better formed flowers than those to be found on the dwarf plants. For covering trellises, arches, fences, walls, or sides of buildings, they are unsurpassed.

Blaze. Plant Patent No. 10. The blazing red blooms are produced in clusters for several weeks during the Rose season, and a second crop of flowers may be expected before freezing weather arrives. \$1 each.

Climbing American Beauty. Moderately fragrant, rich rosy carmine, 3 to 4-inch blooms on long stems, profusely borne by a very vigorous, hardy plant. 65 cts. each.

Dr. W. Van Fleet. Perfectly formed, long, deep pink buds on long stems, with several in a cluster, each expanding to about 4 inches. A vigorous grower. Bears hundreds of delicately perfumed blooms that make good cut-flowers. 75 cts. each.

Doubloons. Plant Patent No. 152. A new and exceedingly handsome yellow Climbing Rose. It was developed from the native Prairie Rose, which makes it much harder than any other yellow climber. \$1.50 each.

Mary Wallace. A vigorous climber with large, very bright pink flowers suffused with gold; double, cup-shaped, and fragrant. Glossy, rich green foliage. Grows 8 to 12 feet high and blooms profusely in June. 75 cts. each.

Mercedes Gallart. A very free-blooming variety, producing quantities of fragrant, cerise-red blooms during the greater part of the summer. Its long stems make it very desirable for cutting. \$1 each.

Mme. Gregoire Staechelin. Immense pearly pink flowers, marked with carmine, borne on long stems and intensely fragrant. If blooms are not cut, the large orange seed-pods will add to the value of this important Rose. 85 cts. each.

New Dawn. Plant Patent No. 1. Many tests in severe climates show this variety is about the hardiest of all Climbing Roses. The blooms are produced as freely as on most Hybrid Tea Roses, and you may expect hundreds of flowers from the opening of the season in June until cold weather closes the season of flowers. The color of the bloom is a delicate blush-pink, and long stems make the clusters desirable for interior decorations. Foliage is dark green and glossy. \$1.50 each.

Paul's Scarlet Climber. The purest red of all the pillar Roses. Clusters of semi-double, vivid scarlet flowers shaded crimson, that retain their color till they fall. Not a very tall climber but hardy and floriferous. 75 cts. each.

Princess van Orange. Plant Patent No. 106. This is a climbing sport of Gloria Mundi and reaches 6 feet in height. When in bloom it is simply covered with masses of blazing red flowers in clusters. One of the best of the recent introductions. \$1 each.

Silver Moon. Immense, semi-double, pure white blooms 4 inches across, intensified by golden yellow stamens, are borne on long, stiff stems. A wonderful Rose. 75 cts. each.

Polyantha Roses

These dwarf Roses are becoming more popular every year for garden decoration because they produce an abundance of bloom all season. The plants average 18 inches in height and are especially valuable for a hedge or border or for massing for spectacular decorative effect.

Price, 75 cts. each, except where noted

Cameo. A sport of Orleans Rose with semi-double, salmon-pink flowers in clusters. These are shell-pink. Grows 15 to 18 inches tall; bushy.

Gloria Mundi. Vivid orange-scarlet. Free flowering.

Ideal. Blackish scarlet flowers profusely produced in large clusters. Always dependable.

Miss Edith Cavell. Large clusters of small, semi-double, brilliant scarlet-red flowers, shaded darker.

Permanent Wave. Plant Patent No. 107. Blooms are large, semi-double, fragrant, and carried in clusters on long stems. The color is a brilliant carmine. Received the Bagatelle Gold Medal for general excellence. \$1 each.

Yvonne Rabier. Clusters of small, pure white flowers with creamy bases.

Hybrid Perpetual Roses

These, because of their wealth of bloom, named June as the month of Roses. They are much hardier, stronger growing plants than the Hybrid Teas and bear an immense crop of bloom in June.

Price, 65 cts. each

Frau Karl Druschki. An immense, pure white, perfectly double Rose, sometimes nearly 6 inches in diameter, abundantly produced in June.

General Jacqueminot. A very popular old Rose known to everybody as the "Jack" Rose. Rich crimson, deliciously fragrant.

Georg Arends. Immense, soft pink, fragrant blooms of fine form. Called a "Pink Druschki." A beautiful Rose.

Mme. Albert Barbier. Soft fawn-yellow flowers, paling to white, with pinkish shades in center; double; cupped.

Ulrich Brunner. Large, cupped flowers of carmine-red, deliciously fragrant. One of the best of this group.

Shrub Rose

Rosa Hugonis. Flowers light yellow, about 2 inches across, borne on long, slender branches. Generally in full bloom Decoration Day. 75 cts. each.

Moss Roses

A group of old-fashioned Roses of moderate growth, readily recognized by the mossy coating which surrounds the calyx of the bloom. The flowers generally are of medium size but very attractive.

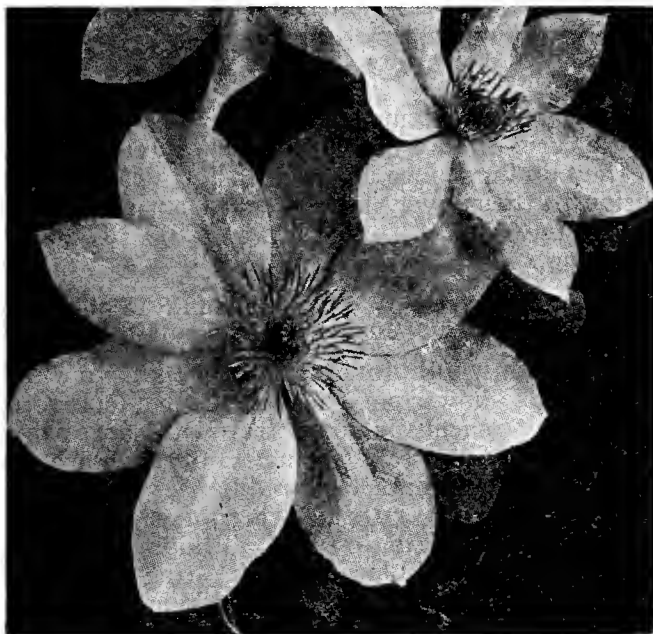
Price, 75 cts. each

Henri Martin. Blooms semi-double and a brilliant crimson color.

Crested Moss. Beautifully mossed pink buds and double pink flowers freely produced on fine healthy plants.



Rosa Hugonis



Clematis



Wisteria



Silver Lace Vine

VINES

Well-placed vines make a wonderful addition to the looks of the home or garden. By softening the sharp corners of the buildings and porches, they add a charm not otherwise obtainable. Vine-draped trees and pergolas have a peculiarly appealing grace not easily

BITTERSWEET (*Celastrus scandens*). Bold vine with large foliage hung in autumn with clusters of orange and yellow berries which are very decorative all winter. 50 cts. each, \$1.35 for 3.

BOSTON IVY (*Ampelopsis Veitchii*). High-climbing, clinging, deciduous vine with lustrous, three-pointed leaves 2 to 4 inches across. 50 cts. each, \$5 per doz.

CINNAMON VINE. A long-lived, vigorous climber with broad heart-shaped leaves and clusters of white, cinnamon-scented flowers. Dies down to the ground each winter but comes up again very quickly in the spring. Large roots, 10 cts. each, \$1 per doz., \$7 per 100.

CLEMATIS Jackmani. Large, flat, 5 to 6-inch, velvety purple flowers, freely produced and highly prized because of their beauty and splendor. 85 cts. each, \$2.25 for 3.

paniculata. Sweet Autumn Clematis. In August or September the plants are densely covered with fragrant white flowers, followed by seeds, each of which has a grayish, fuzzy plume which gives the plant the appearance of being in bloom until winter comes. 45 cts. each, \$1.25 for 3.

Mme. Edouard Andre. Large bright carmine-violet flowers. Unusual and distinct. 90 cts. each.

DUTCHMAN'S PIPE (*Aristolochia siphon*). A fast-growing vine with 6 to 15-inch broadly reniform leaves and pipe-like flowers. 2 to 3-ft. plants, \$1.25 each.

SCARLET TRUMPET VINE. Vigorous climber. Handsome, trumpet-shaped, reddish orange flowers in midsummer. 45 cts. each, \$1.25 for 3.

described, and some of the vines are particularly valuable in covering banks. The following are highly desirable vines. They are all strong, 2-year-old No. 1, field-grown plants, with good root-systems, except Cinnamon Vine and Madeira Vine which are roots.

HONEYSUCKLE (Lonicera), Halliana. Dark green foliage with attractive, sweetly scented flowers, produced from July to frost. Desirable for trailing over fences, arbors, and as a ground-cover for banks. 35 cts. each, \$3.50 per doz.

KUDZU VINE. One of the fastest-growing hardy vines. Foliage large. Small racemes of rosy purple, pea-shaped flowers in August. Fine for permanently covering verandas, dead trees, etc. 40 cts. each, \$1.10 for 3.

MADEIRA VINE. Rapid-growing climber that quickly covers porch, trellis, arbors, stumps, etc. Foliage light green; flowers white, small and feathery, delightfully fragrant. Plant roots in May. Large roots, 10 cts. each, 25 cts. for 3, 75 cts. per doz.

SILVER LACE VINE (*Polygonum Auberti*). Rapid climber. Light green, waxy foliage. Curious, stringy clusters of crystal-white flowers of irregular shape. 75 cts. each, \$2 for 3.

TRUMPET CREEPER (*Bignonia radicans*). The Bignonias are very useful for covering unsightly places, stumps, rockwork, or for planting in crevices in ledges. Large, attractive, scarlet flowers are borne in profusion. 35 cts. each, 95 cts. for 3.

VIRGINIA CREEPER (*Ampelopsis quinquefolia*). One of the best and quickest-growing vines for covering trees, trellises, arbors, etc. The large deep green foliage turns yellow, crimson and scarlet in fall. 45 cts. each, \$1.25 for 3.

WISTERIA sinensis. Handsome, showy, pea-like pale blue flowers in large grape-like clusters. Well adapted for training on porches, arbors, trellises, or trees. They require a deep rich soil. Strong, 2-yr., grafted plants, 90c. each, \$2.50 for 3.

Postage extra. See page 46

HEDGE PLANTS

Hedges or living fences make the most artistic boundaries for the farm, to mark the line between highway and farm, to define the driveways or enclose the home-grounds. They add much to

CALIFORNIA PRIVET (*Ligustrum ovalifolium*). A rapid grower with dark green foliage that persists until early winter. May be pruned to any shape. Unpruned, it assumes an upright, spreading habit, about 10 feet tall. 12 to 18-in. plants, \$1 for 25, \$3.75 per 100, \$17 for 500.

AMUR RIVER PRIVET. Like California but considerably hardier, with foliage not quite so lustrous. Fast upright grower, easily trimmed. 12 to 18-in. plants, \$2.25 for 25, \$8 per 100.

the value of the place. Once planted they require little attention. These are strong, thrifty, attractively shaped plants that will make desirable specimens on your lawn.

JAPANESE BARBERRY (*Berberis Thunbergi*). Compact-growing, much-branched low shrub whose many spines deter animals from breaking through. Its red berries persist until spring. 3-yr. transplanted plants, \$1.60 for 10, \$7.50 for 50, \$14 per 100.

RED-LEAVED BARBERRY (*Berberis Thunbergi atropurpurea*). Exactly like the well-known Japanese Barberry except that the foliage is rich crimson, becoming brilliant scarlet when the sun falls on it. 18 to 24-in. plants, 50 cts. each, \$5 per doz.

HARDY FLOWERING SHRUBS

Flowering shrubs bring the greatest return on investment that one can put into the home-grounds. They thrive with but little care; are attractive even in winter when the branches are without foliage; and when they do burst into bloom transform the grounds into bowers of scented beauty. In addition to their lovely flowers many shrubs develop attractive fruit which lasts well into the winter.

We offer a fine list for planting this spring.

Plants by Parcel Post. Add to the prices given, 10 cts. for 1 plant, 15 cts. for 3 plants, 20 cts. for 6 plants, 30 cts. for 12 plants.



Florida Dogwood



Azalea



Hydrangea

ALTHÆA. Rose of Sharon. A very useful shrub with large, single or double flowers in great profusion in late summer, a time when flowering shrubs are scarce.

Pink, Purple, Red, White, or Variegated. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

ALMOND, Flowering (*Amygdalus*). Pink, double fragrant flowers in May. 2 to 3 ft., 75 cts. each, \$2 for 3.

AZALEAS. These hardy Azaleas bloom with the utmost freedom, becoming solid masses of flowers at their season, and continuing in splendor for several weeks. Plant in slight shade and sheltered from severe winter.

Amœna. Brilliant reddish purple flowers completely cover every twig. Very showy. Evergreen. \$2.75 each.

Hinodegiri. A sparkling red variation of Amœna, with no trace of the purple. Evergreen. \$2.75 each.

mollis. A dwarf, very bushy, deciduous variety. Flowers light yellow to apricot and deep orange. \$2.50 each.

BEAUTY BUSH. An exceedingly handsome ornamental shrub. The foliage and habit are attractive when the bush is out of flower and it is perfectly hardy. It grows 6 to 9 feet high when mature, with long, arching branches. Covered in spring with clusters of small, tubular flowers of the honeysuckle type, borne in such profusion that the bush is one cloud of delicate pink. 2 to 3 ft., 90 cts. each.

BUDDLEIA, Ile de France. A new variety with fragrant, rosy purple flowers suffused with violet, borne in spikes 6 to 9 inches long. The symmetrical bushes are 3 to 4 feet high. 50 cts. each, \$1.35 for 3.

CALYCANTHUS floridus. Sweet Shrub. This is the popular old-fashioned "Strawberry Shrub," with brown, sweet-scented, starry flowers, followed by pods of smooth brown seeds. 2 to 3 ft., 60 cts. each, \$1.60 for 3.

DEUTZIA, Pride of Rochester. A very popular bluish-white form, growing taller and bushier than *D. gracilis*. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

gracilis. A small shrub covered with pure white flowers in graceful nodding racemes. Good for edging borders. 15 to 18 in., 40 cts. each, \$1.10 for 3.

DOGWOOD, Coral (*Cornus alba sibirica*). An upright shrub having bright coral-red branches with dark green leaves, pale beneath, and creamy white flowers in numerous flat-topped clusters, followed by bluish fruits. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

Dogwood, florida. The well-known white-flowering Dogwood. Big, spreading shrub or small tree with large white flowers in spring. Foliage scarlet in autumn. Rich red berries. \$2 each.

florida rubra. One of the loveliest flowering trees. Blooms glowing peach-blossom-pink, tinged darker. A specimen in full bloom is a magnificent spectacle. 3 to 4 ft., \$3 each.

EUONYMUS alatus. Winged Burning Bush. Bushy shrub with corky winged branches. A fine shrub for specimen planting. Leaves turn to rich red and crimson in autumn. 2 to 3 ft., 75 cts. each.

FORSYTHIA. One of the very earliest shrubs to bloom and unsurpassed in splendor and brilliancy by other spring-flowering varieties.

spectabilis. Sturdy, erect bush with an unbelievable abundance of golden yellow flowers a shade or two darker yellow than any other variety. 2 to 3 ft., 60 cts. each, \$1.60 for 3.

suspensa Fortunei. A tall, willowy shrub literally covered with golden bells in early spring. 50 cts. each, \$1.35 for 3.

HONEYSUCKLE, Red Tatarian (*Lonicera tatarica sibirica*). A bushy shrub, reaching 10 feet, with crimson flowers in June, followed by red fruits. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

White Tatarian (*L. tatarica alba*). About the same as the above except that the flowers are white. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

HYDRANGEA, Nicko. Blue Hydrangea. One of the most showy of all plants. When planted in moist soil, flowers may assume a pinkish hue, but blue flowers may be assured by mixing alum with the soil. 1½ to 2 ft., \$1.25 each.

paniculata grandiflora. Big conical trusses of white flowers that soon assume rose and bronze tones, are borne in late summer and last till frost. Severe pruning in early spring brings big trusses of bloom. 18 to 24 in., 50 cts. each, \$1.35 for 3. 2 to 3 ft., 65 cts. each, \$1.75 for 3.

INDIAN CURRANT (*Symphoricarpos vulgaris*). Tall, slender shrub, with coral-red fruits. 2 to 3 ft., 45 cts. each, \$1.25 for 3.

JAPAN QUINCE (*Cydonia japonica*). Often called "Fire Bush." Scarlet and vivid pink flowers. Very early. 1½ to 2 ft., 50 cts. each, \$1.35 for 3.

KERRIA japonica. From June to October this shrub is a golden yellow bouquet, 3 to 4 feet high. Smooth green bark. Showy and desirable. 1½ to 2 ft., 90 cts. each.

LILAC (*Syringa*). Many old Lilac bushes remain to mark an old homestead. Late in May the bush has many purple spikes of fragrant flowers. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

Lilac. Named French varieties:

Belle de Nancy. Double flowers of satiny rose in long clusters.

Ludwig Spaeth. Deep reddish purple flowers in long clusters. Very unusual.

Mme. Lemoine. Narrow clusters of double flowers of purest white.

President Grevy. Double, rosy blue flowers in pyramidal clusters.

Above 4 Lilacs, Bush form, 90 cts. each

MOCK ORANGE, Virginal (*Philadelphus virginialis*). A vigorous, tall grower, with very large, double-crested, pure white, sweetly scented flowers. A decided improvement over the old-fashioned Mock Orange. 2 to 3 ft., 60c. each; 3 to 4 ft., 75c. each.

RHODOTYPOS kerrioides. White Kerria. Very ornamental, medium-sized shrub with pretty foliage and large, single white flowers in late May. Black berries. 2 to 3 ft., 50 cts. each.

SNOWBERRY (*Symphoricarpos racemosus*). Small, rose-colored flowers in June and July followed by large clusters of pearly white fruit which endure into the winter. 2 to 3 ft., 45 cts. each, \$1.25 for 3.

SNOWBALL (*Viburnum opulus sterile*). The old-fashioned Snowball. White flowers in May and June. Very decorative. 1½ to 2 ft., 60 cts. each.

Japan (*V. tomentosum plicatum*). Large, globular, pure white flowers in May and June. The fall foliage is especially fine. 2 to 3 ft., 90 cts. each.

SPIRÆA, Anthony Waterer. Bright rosy crimson flowers in dense corymbs produced abundantly from July till frost. Fine for facing plantings of larger shrubs or edging walks. 1 to 1½ ft., 35 cts. each, 95 cts. for 3.

Van Houttei. One of the most beautiful spring-blooming shrubs. The arching branches bend to the ground under the immense number of corymbs of small white flowers. 2 to 3 ft., 25 cts. each, 65 cts. for 3.

STEPHANANDRA flexuosa. A graceful shrub seldom more than a few feet high. An excellent plant for growing in the shade of other shrubs or trees. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

TAMARIX africana. A very distinct variety covered with sprays of delicate soft pink flowers during July and August, when few other shrubs are blooming. 2 to 3 ft., 50 cts. each.

VIBURNUM, Maple-Leaf (*V. acerifolium*). Shrub, attaining 5 feet, with slender, upright branches. Flowers yellowish white; fruit almost black. Grows well under trees. The foliage assumes a handsome dark purple color in autumn. 2 to 3 ft., \$1.25 each.

Fragrant (*V. Carlesi*). One of the newest and best Viburnums. Clusters of fragrant pink flowers appear in May. Plant grows to about 6 feet high. 1½ to 2 ft., \$2 each.

WEIGELA, Abel Carriere. Brilliant deep pink. Blooms in May and June and again in the fall. Dark green foliage. 2 to 3 ft., 75 cts. each.

Eva Rathke. An upright shrub 5 to 6 feet high, covered in late May with an abundance of rich reddish purple, trumpet-shaped flowers. 2 to 3 ft., 75 cts. each, \$2 for 3.

floribunda. A tall, graceful shrub bearing lovely dark crimson flowers. 2 to 3 ft., 75 cts. each, \$2 for 3.

rosea. An attractive shrub with dark green foliage and trumpet-shaped, slightly fragrant, rose-colored flowers. 2 to 3 ft., 50 cts. each, \$1.35 for 3.

WINTERBERRY (*Ilex verticillata*). A very ornamental shrub with upright branches and light green foliage. Its bright scarlet berries remain until midwinter. 2 to 3 ft., \$1 each.

Ornamental and Shade Trees

CATALPA Bungei. Umbrella-shaped trees on straight trunks. Heart-shaped leaves. Good for formal effects. 5 to 6 ft., \$1.50 each.

CHERRY, Japanese. Spring-flowering, bearing a profusion of blossoms of exquisite effect. Very popular.

James H. Veitch. Double; pink.

Kwanzan. Double; dark pink.

Mt. Fuji. Double; pure white.

All Japanese Cherries, 3 to 4 ft., \$1.75 each

CRAB, Bechtel's Double-flowering (*Malus*). Delicate pink blossoms in the spring and handsome fruits in the fall, which are attractive to the birds. 3 to 4 ft., \$1.50 each.

ELM, Chinese. A quick-growing Elm of pleasing form and apparent freedom from blight. 8 to 10 ft., \$2.50 each.

Vase. A type developed from the American Elm. Largely used for street planting and the home-grounds. 8 to 10 ft., \$1.75 each.

MAPLE, Silver. Noble 80-foot shade tree with dense branches and beautiful pointed foliage silvery on the under side. 8 to 10 ft., \$1.25 each.

MOUNTAIN-ASH. 8 to 10 ft., \$3 each.

MULBERRY, Teas' Weeping. Round-headed tree with drooping branches; resembles an open umbrella. 2-yr. heads, 5 to 6-ft. stem, \$2.50 each.

PLUM, Red-Leaf (*Prunus Newport*). This little tree has deep purple leaves which retain their color until fall. In the spring it is covered with fine deep pink flowers. 4 to 5 ft., \$1 each.

POPLAR, Bolleana. The white or Silver-Leaf Poplar. A columnar tree with foliage silvery gray underneath. 6 to 8 ft., \$1.75 each.

Lombardy. Slender, erect trees, planted for landscape effect and screens. 8 to 10 ft., 90 cts. each.

SYCAMORE or PLANE, European (*Platanus orientalis*). Useful for street and specimen planting. Bright green foliage. 8 to 10 ft., \$2.25 each.

WILLOW (*Salix babylonica*). The Weeping Willow is our most graceful tree for moist ground, especially fine near a pool or brook. 8 to 10 ft., \$1.75 each.



Mock Orange, Virginal



Weigela, Abel Carriere



Crab, Bechtel's Double-flowering

Rock-Garden and Hardy Perennial Plants

Hardy perennial flowers are depended on to give the garden continuity from year to year and to afford that appearance of settled contentment and quietude which comes with their increased size and reappearance in the same places year after year.

If the ground is well prepared by deep spading and fertilizing, they will need little attention beyond keeping the surface hoed and the weeds pulled for the first year—after that they are usually big and strong enough to take care of themselves.

One of the fine things about a rock-garden is that each pocket of soil can be made up to suit the particular plant you want there. In this way one can have rare treasures that would not live in an ordinary garden.

Price, 25 cts. each, 65 cts. for 3, \$2.50 per doz., except where otherwise noted. If wanted by Parcel Post, add 10 cts. extra for each plant, 15 cts. for 3, 35 cts. per doz.

Varieties marked **R** suitable for Rock-Gardens



Aquilegia (Columbine)



Arabis alpina



Dianthus barbatus

AQUILEGIA (Columbine), Mixed Hybrids. Wonderful colors; very long-spurred flowers.

ARABIS alpina. Rock Cress. White flowers borne in dense masses. They are easily grown and bloom in early spring.

ARMERIA Lauchiana rosea. Thrift; **R** Sea Plant. Bright rosy red. Grows 3 to 6 inches high. Blooms May and June.

BELLIS perennis. Double Daisy. Low-growing, spring-flowering, semi-hardy perennial that is good for shady places. White, Pink, and Red.

CAMPANULA calycanthem. Cup-and-Saucer. Large, double flowers resembling a cup and saucer. Mixed colors.

R carpatica. Bellflower. Blue. A pretty species grown in compact tufts not exceeding 8 inches.

Medium. Single Canterbury Bells. Mixed colors.

CARNATION, Hardy Border. A good hardy strain for outdoor culture. Flowers in a great variety of colors are borne from May to October.

CENTAUREA montana. Hardy Cornflower. Grows 2 feet high. Violet-blue flowers from July to September.

CERASTIUM tomentosum. Snow-in-Summer. A low-growing plant having silvery white foliage; an abundance of snow-white flowers.

CHEIRANTHUS Allioni. The Siberian **R** Wallflower is a biennial and grows about 18 inches high. The small, vividly orange flowers are among the showiest things in nature.

CHRYSANTHEMUMS, Hardy. Bloom after other flowers have gone.

Bronze, Pink, Red, White, Yellow.

COREOPSIS grandiflora. Tickseed. Bright yellow single flowers on long, branching stems. Will bloom all summer if flowers are kept cut.

DAPHNE Cneorum. Garland Flower. **R** Unusually attractive, dwarf, bushy evergreen plant bearing bright pink flowers at tip of every branch during May and August. 7 to 9 inches. 75 cts. each, \$7.50 per doz.

DELPHINIUM, Gold Medal Hybrids. Hardy Larkspur. Very long spikes of the choicest colors.

Wrexham Hollyhock-flowered Strain. New giant-flowered strain of superior quality. Flowers come in blue, white, and pink combinations—many of them bicolor.

Belladonna. Light sky-blue.

Bellamosa. Dark blue.

DIANTHUS barbatus. Hardy Sweet William. Large heads of red, white, and pink flowers in early summer.

R deltoides rosea. A beautiful little plant with narrow leaves bearing a profusion of small crimson flowers.

plumarius. Hardy Pinks. Low growing, grass-like foliage; flowers clove-scented; wide range of colors.

DICENTRA spectabilis. Bleeding-Heart. An old-fashioned favorite. Its long racemes of graceful, heart-shaped pink flowers are always attractive. 50 cts. each, \$1.35 for 3.

eximia. Finely cut foliage and showy racemes of pretty pink flowers. 50 cts. each, \$1.35 for 3.

DIGITALIS. Foxglove. Spikes of tubular flowers in mixed colors, White, Rose, and Purple.

GAILLARDIA grandiflora, Mixed. Blanket Flower. Large orange-yellow, scarlet, and crimson flowers in profusion. Very valuable for cutting.

GEUM (Avens), Mrs. Bradshaw. A **R** splendid new variety with large, double flowers of fiery red.

Lady Stratheden. New. Double; rich golden yellow.

GYPSOPHILA. Baby's Breath. Small white flowers on branched stems so thick as to give the plant a white lace-like effect. Excellent for cut-flowers.

Bristol Fairy. Double pearly white flowers larger than the old-fashioned type, and produced abundantly all season. Very lovely for cutting. 50 cts. each, \$1.35 for 3.

HEUCHERA sanguinea. Coral Bells. Bright crimson flowers from June to September. Very free flowering.

HIBISCUS. Marsh Mallow. Strong, almost shrubby plants with gigantic red flowers.

HOLLYHOCKS, Double Mixed (Althæa rosea). Bold, spire-like stalks of bloom varying from red to white, also yellow.

IBERIS gibraltarica. Hardy Candytuft. **R** Compact; lilac flowers.

sempervirens. Pure white flowers in spring. Dark glossy evergreen leaves. Fine edging plant.

IRIS, German. Flag. Superbly colored varieties of this popular garden plant. 20 cts. each, 3 for 50 cts., \$1.75 per doz.

Japanese. White, gold, or blue flowers; very attractive. 30 cts. each, 85 cts. for 3.

Siberian. A free-blooming Iris with graceful blue or white flowers in June.

ROCK-GARDEN AND HARDY PERENNIAL PLANTS, continued

LILY-OF-THE-VALLEY. A dainty plant for shady places. Fragrant, bell-like, white flowers in May. A good ground-cover.

LINUM. Flax. A desirable plant for border or rockery, growing 2 feet high. Light, graceful foliage and large flowers all summer.

LUPINUS polyphyllus, Mixed. Grows 2½ to 3 feet tall and produces White, Pink, or Lavender-Blue flowers.

MYOSOTIS palustris. Forget-me-not. A lovely dwarf plant for damp places. Spreads rapidly and carpets the ground.

PAPAVER alpinum. Silky orange-yellow flowers on slender stems 15 inches high. Very bright and pretty.

nudicaule. Iceland Poppy. Grows 1 foot high, with very pretty single, crinkled flowers in White, Salmon, Yellow, or Orange.

Papaver orientale. Oriental Poppy. Immense, single, bright scarlet flowers in spring.

orientale, Mrs. Perry. Orange-apricot. The best of all the pink Poppies.

PHLOX. A universal favorite and the most showy of garden plants. They grow 2 to 3 feet high, according to variety, and have large heads of bloom. Thrive in a cool, moist, well-drained soil.

B. Comte. Dark red.

Beacon. Brilliant cherry-red.

E. I. Farrington. Beautiful salmon-pink.

Enchantress. Salmon-pink.

Ethel Pritchard. Lavender-blue.

Feuerbrand. Brilliant vermilion-scarlet.

George Stipp. Carmine with violet-pink center. 35 cts. each.

Hauptmann Koehl. Dark blood-red. 35 cts. each.

Johnston's Favorite. Crimson.

Miss Lingard. Pure white, pale pink centers. The most popular and earliest white.

Mrs. Jenkins. Large; pure white.

ROVATA caroliniana. Mountain Phlox. Reddish pink flowers in May and June.

Painted Lady. Silvery pink with salmon shadings and red eye.

Rokoko. Large, clear soft pink flowers. 35 cts. each.

Rijnstroom. Rose-pink.

Thor. Salmon-pink, suffused scarlet.

Von Hockberg. Brilliant red.

PHLOX subulata. Moss or Mountain Phlox. Pink. An early spring-flowering, moss-like plant with evergreen foliage.

Alba. Pure white.

Fairy. Pale blue.

Rosea. Rose-pink.

PLATYCODON grandiflorum. Balloon Flower. A very good hardy perennial producing large, showy, steel-blue flowers the whole season. Excellent for borders.

PRIMULA veris. Hardy Primrose. This strain includes various shades of violet-purple and lilac, as well as buff-orange and salmon. 35 cts. each, \$1 for 3.

PYRETHRUM hybridum. Persian or Painted Daisy. A good hardy perennial with fern-like foliage. Fine for cutting or planting in the hardy border. Mixed colors.

SCABIOSA caucasica. Pin-Cushion Flower; Mourning Bride. Flowers a soft shade of lavender. Grows 1½ to 2 feet high and blooms from June to September.

SEDUM acre. Golden Moss. Low, tufted perennial that spreads over the ground. Bright yellow flowers.

album. A beautiful, glistening, waxy sort of plant of great vigor with delicate, frost-like flowers in midsummer.

kamtschaticum. A bold, leafy plant 6 inches high with broad heads of brassy yellow flowers.

lydium. Bronze foliage. Pink flowers in July.

sarmentosum. Rapid-growing plant with yellowish green foliage and yellow flowers in May and June.

Sieboldi. Round, succulent glaucous foliage. Bright pink flowers in August and September.

spectabile. One of the prettiest erect-growing species with broad, light green foliage and immense heads of handsome, showy, rose-colored flowers.

stoloniferum. One of the most desirable. Evergreen leaves and purplish pink flowers in July and August.

SHASTA DAISY (Chrysanthemum maximum), Alaska. Pure white blooms 4 to 5 inches across with yellow centers.

TRITOMA Pfitzeri. Red-Hot Poker. Spikes of orange-scarlet flowers.

VERONICA. Speedwell. A low-growing perennial on the foxglove order. Blue flowers.

Rincana. Silvery gray foliage and spikes of violet-blue flowers in July and August.

VINCA minor. A tufted, evergreen, half-trailing plant. Dark, leathery foliage and large, purple-blue flowers. Useful in dry, shady places.

VIOLA. Tufted Pansies. Best edging plant for hardy perennial border. Will bloom from May to October.

Admiration. Giant deep blue-purple.

Apricot. Exquisite apricot-yellow.

Jersey Gem. Rich pure violet.

Mauve Queen. Light blue.

Rosy Gem. Deep violet-blue.

White Perfection. Fine white.

Yellow Perfection. Fine yellow.

YUCCA filamentosa. Adam's Needle. Broad, sword-like, evergreen foliage and large, drooping, creamy white flowers on stems about 6 feet high.

filamentosa Hockerii. Variegated leaved. 45 cts. each.



German Iris



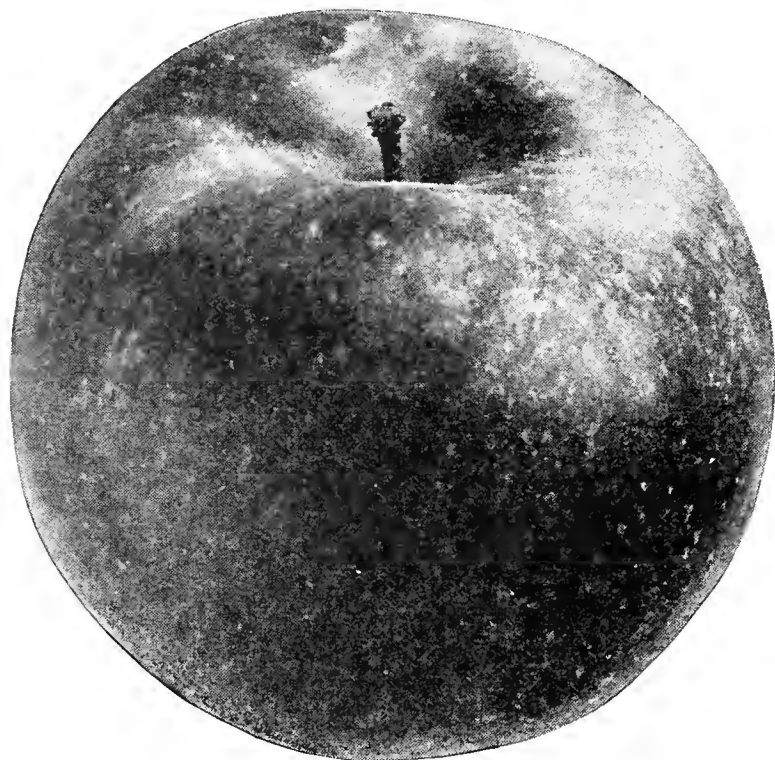
Sedum acre



Hardy Phlox, Enchantress

FRUIT TREES

In making the selection of fruits to offer our customers, we believe the following varieties will give the best results. All fruit trees offered are No. 1 grade, two-year-old budded trees. Prices are f.o.b. cars, Pittsburgh, Pa. (Fruit Trees are not mailable.) The supply of fruit trees for this spring is exceedingly short, therefore the prices here given are subject to change.



Baldwin Apple

Apples

80 cts. each, \$8 for 10

- Baldwin.** Best all-round winter Apple in northern counties.
Delicious. The finest dessert Apple imaginable; midwinter.
Duchess of Oldenburg. Tart; midsummer.
Early Harvest. Fruit yellow; flesh white, crisp and juicy. Good for cooking. Early summer.
Grimes Golden. Delicious flavor all its own; early winter.
Hyslop Crab. Fruit dark red, borne in clusters. The most popular variety for jelly.
Jonathan. Beautiful red spicy-flavored fruits; early winter.
Maiden's Blush. Pale yellow with red cheek. Late fall.
McIntosh. Spicy; bright red; late fall sort.
Northern Spy. Desirable winter sort for northern counties.
Red Astrachan. Best summer dessert and cooking Apple.
Rome Beauty. Handsome fruits of good quality; midwinter.
Stayman Winesap. Dark red, juicy, high-quality winter Apple.
Wealthy. High-quality, early fall sort.
Whitney Crab. Large fruit; yellow striped red.
Yellow Transparent. Earliest ripening Apple; good cooker.

Pears

95 cts. each, \$9.50 for 10

- Bartlett.** Without doubt the best dessert and canning Pear.
Clapp's Favorite. Superb large yellow fruits; early.
Duchesse d'Angouleme. Big, rich-flavored fruits; late.
Kieffer. A fine culinary Pear; keeps well in storage.
Seckel. Small, delicious fruits; extremely popular.
Sheldon. Not large, but one of the best Pears. Sweet, delicious flavor.

Plums

95 cts. each, \$9.50 for 10

- Bradshaw.** Fine, large, early, juicy Plum; early August.
German Prune. High-quality fruits; stands more frost than others; late August.
Green Gage. Large, greenish fruits, fine for canning.
Italian Prune (Fellenberg). Delicious, juicy flesh; fine for drying.
Lombard. Handsome reddish fruits with pleasant, juicy flesh.
Shropshire Damson. Like Damson but larger, fine for butter.
Yellow Egg. Oval fruit of rich golden yellow.

Peaches

55 cts. each, \$5 for 10

- Belle of Georgia.** Midseason. White. Freestone.
Crawford Early. Yellow and of unexcelled quality.
Crawford Late. A fine yellow Peach of finest flavor.
Elberta. The standard yellow; large, highly flavored, juicy fruits in early September.
J. H. Hale. Big yellow fruits of high quality; late August.
South Haven. *New.* A variety similar to Elberta but two to three weeks earlier. Productive, well-flavored, and possesses all the good shipping qualities of the original Elberta.

Quinces

\$1 each, \$9 for 10

- Champion.** Large, late-ripening sort of high quality.
Orange. A mighty fine-quality variety and extremely popular.

Sweet Cherries

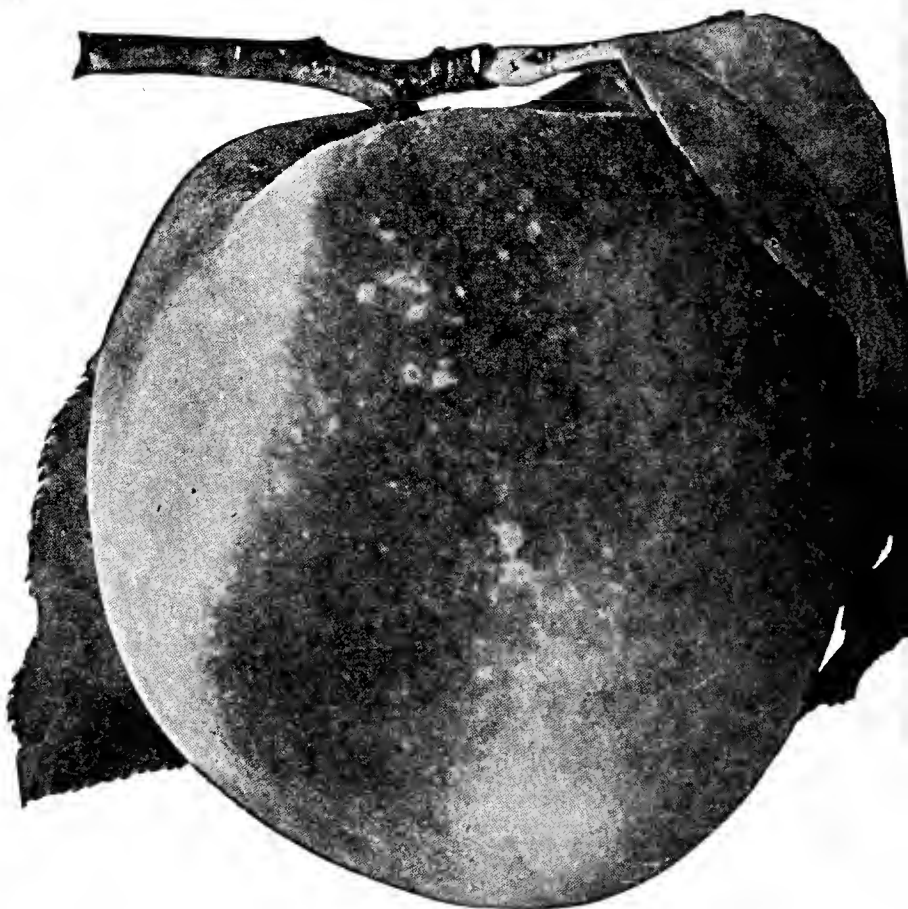
\$1.10 each, \$10 for 10

- Black Tartarian.** Fine old fruitful sort; black fruits; late.
Governor Wood. A fine home sort; russet-yellow.
Napoleon. Prolific; yellow with red cheeks; midseason.
Windsor. Large, liver-colored; hangs long time; very late.

Sour Cherries

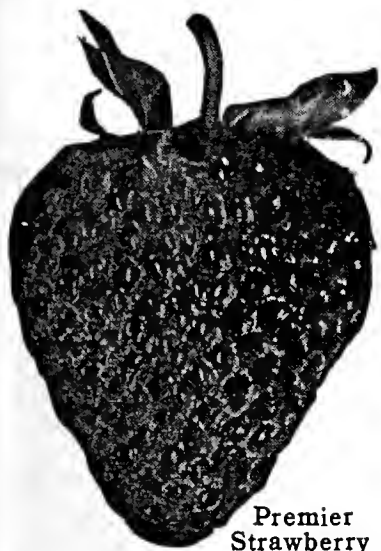
\$1.10 each, \$10 for 10

- Early Richmond.** Popular early fruit; good cooker.
Montmorency. The best sour Cherry; heavy crops; midseason.
English Morello. Dark red; rich fruits; very late.



Elberta Peach

Special prices quoted on larger quantities on receipt of specifications



Premier Strawberry

STRAWBERRY PLANTS

Strawberries in the Garden. No home-garden is complete without a bed or a few rows of Strawberry. This earliest and most delicious fruit, coming at a time when no other fresh fruit can be had, is liked by everybody. By planting some everbearers in addition to the early varieties, you can have fresh berries for the table from June to November, or until freezing weather sets in.

Strawberries for Profit. We know of no other crop that produces equal returns for the acreage planted or the time and labor expended. Market-gardeners and farmers are beginning to appreciate the enormous and ever-increasing demand for fancy home-grown berries and are limiting their acreage only to the amount they are able to take care of at picking-time.

Our Plants. The plants we offer are "new-ground plants" grown in virgin soil in one of the best plant-growing districts of the Northwest. They are large, strong, fully developed plants, ready to make a quick, steady growth the first year.

Order Early. The earlier you order, the surer you are to get the varieties you want. Strawberry plants should be set out as early in spring as the ground can be prepared, the earlier the better. The plants will be sent as soon as they can be dug in the spring and if your ground is not ready, heel them in and cover with straw until you plant them.

DISTANCE FOR PLANTING AND PLANTS REQUIRED PER ACRE

Commercial use. 3 3/4 ft. x 1 1/2 ft.	7,920 plants
Garden use. 2 1/2 ft. x 1 1/2 ft.	11,600 plants
Everbearing Strawberries. 2 1/2 ft. x 1 1/2 ft.	11,600 plants

Extra-Early

Premier. It is the earliest of all Strawberries, has a long fruiting season, and bears unusually large crops of bright, glossy, firm, red berries above the average in size. Excellent shipper.

Blakemore. One of the firmest berries we know, glossy bright red, high in Strawberry flavor.

Fairfax. Large, sweet, richly flavored bright red berries. Vigorous grower and disease-resistant.

Dorsett. A vigorous plant-maker with bright red berries of wonderfully high flavor. Excellent for table and home use.

Second-Early

Cooper. The largest Strawberry ever produced. Berry has a sweet, delicious flavor. A large and vigorous variety.

Senator Dunlap. For many years has been grown as the main-crop berry. A very heavy bearer of good-sized, uniformly shaped berries of a dark red color.

Medium Late

Catskill. By far the best new midseason berry that has been introduced recently. Fruit is extra large and the plant is a heavy bearer and vigorous grower. Can be depended on for good crops and the quality is excellent.

Everbearing

Mastodon. Very productive; unusually large size; brilliant, attractive color; and excellent shipping qualities. Produces fruit ninety days from planting. Pick the first crop from July to killing frosts; the second crop the following June; and the third crop from August to killing frosts in late autumn.

GEM. This new variety has four outstanding points: (1) Large size, which holds from the first to the last picking; (2) good flavor—a true Strawberry flavor which is lacking in most Everbearers; (3) firm, solid fruits which will reach the market in good condition; (4) productiveness above most other sorts, in either wet or dry seasons.

PRICES

	Per 25	Per 50	Per 100	Per 1,000
Premier. Extra-early	\$0 75	\$1 25	\$1 80	\$8 00
Blakemore. Extra-early	75	1 25	1 80	7 00
Fairfax. Extra-early	80	1 30	1 90	9 00
Dorsett. Extra-early	80	1 30	1 90	8 00
Cooper. Second-early	75	1 25	1 80	8 00
Senator Dunlap. Second-early	65	1 10	1 70	6 00
Catskill	80	1 30	1 90	9 00
Mastodon. Everbearing	90	1 50	2 50	12 00
Gem. Everbearing	90	1 50	2 50	12 00

Orders for 500 or more of one variety at the 1,000 rate.

At the prices quoted, we pay the postage, except at the 1,000 rate which is f.o.b. nursery.

On orders for 500 plants and upward we recommend express shipment.

CURRANTS

2-year plants, 35 cts. each, \$3.25 for 10

Fay's Prolific. Medium to long clusters of dark red, juicy fruits.

Perfection. Large, bright red fruits; big clusters.

Wilder. Medium-sized, mildly acid red berries in large clusters.

GRAPES

2-year plants, 30 cts. each, \$2.75 for 10, unless noted

Brighton. Big red berries of excellent flavor; productive and vigorous.

Catawba. Luscious dark red berries; late ripening and keeps well.

Concord. The standard Grape. Rich, sweet juicy fruits. 15 cts. each, \$1.25 for 10.

Delaware. Red, sweet and delicious.

Moore's Early. Like Concord, but two weeks earlier.

Niagara. An extra-fine, sweet, white Grape.

Worden. Large bunches of big, black berries of high quality. Earlier than Concord.

GOOSEBERRIES

2-year plants, 40 cts. each, \$3.75 for 10

Downing. Whitish green. The most widely planted and highly prized sort.

Red Jacket. Large reddish green fruits.

RED RASPBERRIES

Chief. *New.* Produces good-sized berries, even in hot weather, 7 to 10 days earlier than Latham, is heavier yielder, hardier, and a more vigorous grower. Fine shipper.

Latham. Best late sort. Very productive of richly colored, delicious-flavored berries.

BLACK RASPBERRY

Cumberland. Very vigorous and productive. Berries large, firm, jet-black, with delicious flavor. Good shipper.

BLACKBERRY

Eldorado. Of best quality and always dependable. A heavy bearer of great jet-black berries. So strong and vigorous that the plants survive the severest winters.

PRICES

	Per 12	Per 25	Per 50	Per 100
Raspberries				
Chief	\$1 10	\$1 60	\$2 50	\$3 75
Latham	1 10	1 60	2 50	3 75
Cumberland	1 10	1 60	2 50	3 75

Blackberry
Eldorado..... 1 10 1 60 2 50 3 75

One-year No. 1 plants. Prices given are postpaid.



Concord Grapes

FIELD SEEDS



A field of Timothy and Clover

The Grains and Grass Seeds we offer are selected with special reference to their purity and germination, and great care is used to have them free from noxious foreign seeds. Every lot of seed is tested by a competent seed-analyst for purity and germination before it is offered for sale. A tag is attached to every bag showing the results of the test, also the origin of the seed. With this information, every farmer knows exactly what he is getting.

We handle the very best seeds the market affords. Quality is

our first consideration. With over 60 years' experience, you can depend on us for your seeds.

Prices. Owing to the frequent changes in the prices of Field Seeds and Grains, we cannot, in fairness to our customers or ourselves, name prices in our Catalogue. Catalogue prices are largely guess-work, and we prefer to have our customers ask us for prices when they are ready to buy, specifying the quantities of the different seeds wanted. With the prices we will send samples, with purity and germination tests.

Descriptions of Grass Seeds are found on page 3

CLOVERS

MEDIUM RED. More widely known than any other variety of Clover. Makes a standard Clover for hay purposes, as it can be cut at least twice in the season. Plants grow about 2 feet in height. Sow the seed in the early spring or late summer at the rate of fifteen to twenty pounds to an acre. If used with other seeds, ten pounds to an acre will be sufficient.

MAMMOTH RED. Sometimes called Sapling or English Clover. It is much ranker than the Medium Clover, and yields a much larger crop per acre. It does well on poor soil, is hardy, and usually will stay in the ground longer than Medium Clover.

ALSIKE. One of the best for sowing with Timothy. The seed may be sown in spring, late summer or early autumn, and as the plants are perfectly hardy, the field seldom requires reseeding. The flowers resemble White Clover, but have a red tinge on the edge of the petals and are considerably larger. Thrives better on thin soils than Red Clover. Sow the seed in the early spring or late summer at the rate of eight to ten pounds to an acre.

SWEET. This is a legume whose value today as a soil-improver is much appreciated. It is also used for forage. It is recommended by authorities and farmers everywhere. Will do well in most any soil, but it requires lime and the seed should be inoculated. It may be sown either in the spring or fall. Sow about twenty pounds of seed to an acre. Although a great number of different species are grown in the Old World, we recommend for this climate only the White Blossom Biennial (*Melilotus alba*).

CRIMSON. This Clover is used principally for turning under as a green fertilizer, or for sowing with corn for a winter cover-crop. If desired for feed, the plants should be cut just before they come into bloom. Seed may be sown any time after the first of April at the rate of twenty pounds to the acre. Plants

Clover, Crimson, continued

are strictly annual, therefore the field must be reseeded every year. Thrives on poor land and increases fertility of the soil.

WHITE. White Clover is specially valuable for lawn planting and is likewise good for pasturage. Seed can be sown any time in early spring or summer. It is perfectly hardy and very thrifty. Use from ten to twelve pounds to the acre if sown alone; about five pounds to the acre if sown on old sod or with other Clover.

ALFALFA

One of the most nutritious plants grown; valuable as a dried hay or for pasture. With proper cultivation it can be grown on some part of almost any farm in Pennsylvania or adjoining states. Two or three cuttings can be made in a season, producing from 3 to 5 tons of hay per acre. Ton for ton its feed-value equals that of wheat-bran. From 12 to 15 pounds of seed are usually sown to the acre; some growers sow only 10 pounds to the acre. We sell the very best northwestern American-grown seed.

GRIMM ALFALFA. This variety is well known and is sown because of its hardiness, productiveness, and greater resistance to all types of "yellowing." The extra cost per acre for seed of this variety is generally justified.

Inoculate all Clover and Alfalfa seed with Farmogerm.
See page 63

TIMOTHY

A description of this old familiar hay-making grass is unnecessary here. It is recognized by almost everyone wherever found, and is probably the most extensively grown of all the grasses. It may be sown alone or with Red or Alsike Clover, or with other grasses. From twelve to fifteen pounds of seed are usually sown to the acre.

PERMANENT PASTURE MIXTURE. See page 3.

MISCELLANEOUS FARM SEEDS

Treat seeds of legume crops with Farmogerm and seed-grains with New Improved Ceresan. See page 63

SOY BEANS. A valuable plant for bringing nitrogen into the soil. It is also excellent for green or dried fodder, and the seed is very rich in protein, making an excellent dairy feed when balanced with other grains. Seed should be sown during the months of May or June, using at least one bushel to the acre, when sown broadcast, or when sown in drills, $2\frac{1}{2}$ feet apart, about three pecks to the acre. We handle two varieties—**Wilson** and **Manchu**. The Wilson is a well-known variety in Pennsylvania for an early hay crop. It has fine stems, produces abundant foliage, and is also suitable for silage. The Manchu is a good all-purpose variety. Valuable for forage or hogging down.

COWPEAS. One of the best soil-enrichers, taking the nitrogen from the air and storing it in the soil; valuable also for hay, forage, ensilage or turning under. They should be sown in this latitude in May or June, using, when sown broadcast, one and one-half to two bushels to the acre. Many different varieties are grown in the United States, but the most suitable for sowing in the North are the **Whippoorwill** and **New Era**.

CANADA FIELD PEAS. Used for hay and pasture as well as soil-improvement. Canada Field Peas should be sown as early as possible in the spring, either alone or with oats. When sown broadcast alone, at least two bushels of seed to the acre should be used, or with oats, one and one-half bushels of Peas and one bushel of oats.

DWARF ESSEX RAPE. Especially valuable for feeding sheep, hogs and cattle. Claimed to have a feed value greater than clover. Always used as a pasture and not for hay. Its growth is similar to turnip-tops, but heavier and taller. If seed is sown in May the field should be ready for pasture in July. However, seed may be sown either in early spring, summer or fall. If sown in drills, about five pounds of seed will be required for an acre; if sown broadcast, ten pounds to the acre.

BUCKWHEAT. Japanese and **Silver Hull** are the two leading varieties. The Silver Hull produces whiter flour, but the Japanese is more productive. The Silver Hull grows particularly well on poor soil and matures a little later than the Japanese. Seed required, one to one and one-half bushels to the acre.

MILLET. A medium-early forage plant which will grow in almost any climate or soil and produces heavy yields of fodder. The crop should be cut while the plants are in bloom, or at least before the seed forms. Seed may be sown during the month of May or the early part of June at the rate of from thirty to forty pounds to the acre. The golden variety is considered the better for hay.



Soy Beans

WINTER or HAIRY VETCH. One of the best legumes, whether used for a hay crop, pasture, soil-improvement or cover-crop. Thrives on light soils and is very hardy, remaining green throughout the winter. May be sown in the spring or fall, using from sixty to seventy pounds of seed to the acre when sown alone. It is better, however, to furnish a support for the Vetch by sowing rye, barley or oats with it at the rate of one-half bushel of grain and fifty pounds of Vetch to the acre.

SORGHUM or AMBER CANE. Used principally as a summer fodder for cattle. Plants will grow rapidly and at least two crops can be cut each season. If carefully cured it will make an excellent dry fodder. The seed may be sown in drills about 30 inches apart, at the rate of five to six pounds of seed for an acre. If sown broadcast, from seventy-five to one hundred pounds of seed are generally used.

LESPEDeza (Japan Clover). This is a pasture or hay plant that is very popular in the southern states, where it will give good results, even on the poorest soils. It is quite extensively used for lawn purposes in sections suited to it.

BARLEY. We have the Oderbrucker variety. It is a stiff-strawed, six-rowed, bearded Barley, the heaviest yielder that has been introduced, both in grain and straw. Two bushels of seed will be required for an acre.

SUDAN GRASS. Grows very rapidly and is recommended as a substitute for millet for a catch-crop. Attains a height of from 5 to 9 feet and has great drought-resisting qualities. It is strictly an annual and dies each year, like millet. If sown in rows, four to six pounds of seed per acre is recommended or broadcast sixteen to twenty-four pounds per acre.

WINTER WHEAT. We can supply the leading sorts of Winter Wheat. Our stock usually consists of **Leaps Prolific**, **Pennsylvania 44**, **Forward**, and **Klondyke**. Write us for samples and prices before seeding time.

SPRING WHEAT. If your winter wheat happens to be killed by extreme cold weather, you can still secure a crop by sowing Spring Wheat in early spring. **Marquis** is the leading variety sown in Pennsylvania.

WINTER RYE. Usually sown as a cover-crop, getting the seed into the ground before the middle of November. About one and one-half bushels of seed will be required for an acre.

SPRING RYE. Matures early and makes an excellent green food when cut, or will supply pasturage for several weeks. Distinct from the winter sorts, as the seeds are smaller.

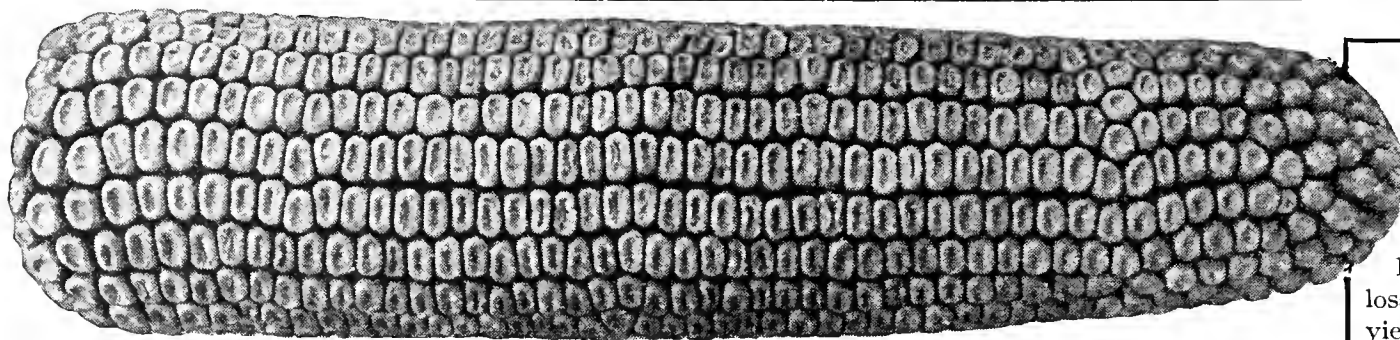
OATS

PATTERSON. An old and well-established variety originated by Pennsylvania State College. Medium early, with rather small, light yellow grains. The straw is fairly long but only medium stiff. A heavy yielder.

CORNELLIAN. A branching or tree-shaped variety. The kernels are long, rather slender, with very thin hulls. The grains do not make a very attractive appearance, but on account of the thin hulls it has excellent feeding quality. A remarkably heavy-yielding variety of high-quality Oats for feeding.

STORM KING. A side Oats that has been grown successfully for some years. It derives its name, Storm King, from the strength of the straw, which often measures from $4\frac{1}{2}$ to $5\frac{1}{2}$ feet in height. It will stand the most severe winds without lodging. Heads long, containing an unusually large number of grains; yields from 70 to 100 bushels to the acre.

SWEDISH SELECT. This variety is too well known to require a lengthy description here. The quality of the grain is unsurpassed. Very thick kernel and thin shuck. Does not have a long beard like common Oats. The straw grows to a medium height, is very stiff, and consequently seldom lodges. It has proved to be a wonderful yielder.



Improved Leaming Corn

**Protect Your
Seed Corn With
Stanley's Crow
Repellent**

It is economical to use, saves loss of seed, and insures larger yield per acre. See page 64.

FIELD CORN

We have always made a specialty of Seed Corn, supplying our trade with only those varieties that experience has proved are most suitable for the climate of Pennsylvania, Ohio, and West

GOLDEN SURPRISE. An old-time variety maturing in 90 to 95 days. Because of quality, yield, and color, Golden Surprise is one of our most popular Corns. Ears are good size, with 14 to 18 rows of long, light orange kernels. A crackerjack good Corn for the crib, and has a host of friends.

SURE-CROP. The tremendous quantity of shelled Corn this variety produces to the acre surprises everyone who grows it. Generally there are two good ears to a stalk. The grain is very long—and the cob very thin. Has a rich, deep yellow grain, making it much desired by millers. The fodder grows from 8 to 10 feet high. Ripens in 90 to 100 days.

EARLY ORANGE YELLOW DENT. A 90-day Corn that is almost a giant, stalks ranging from 8 to 11 feet high. The ears are 8 to 10 inches long, with 16 rows on a red cob. One of the earliest maturing and prettiest yellow Dents in cultivation, which has made a reputation for yield and quality.

Virginia. Our Seed Corn is carefully hand-picked and tipped and butted before it is shelled. We aim to have every variety true to name and of high germination.

PRIDE OF THE NORTH. A Yellow Dent variety, maturing in 90 days. Ears 8 to 10 inches long, sixteen rows on the ear, cob small, grain above medium size and closely set. One of the hardiest, and especially adapted to the northern planter; will mature farther north than any other Dent Corn.

IMPROVED LEAMING. Matures in 90 to 100 days. Produces a good-sized ear, with deep, broad grains. A large, vigorous, and quick-growing sprout makes leafy fodder; one of the best varieties for silage. Improved Leaming has yielded as high as 75 bushels of shelled Corn per acre.

WHITE-CAP YELLOW DENT. An early sort which grows well on light soil; grain is yellow with white tip. Nearly as early as Pride of the North, maturing in from 90 to 95 days. Ears from 8 to 10 inches long, well filled, with sixteen or eighteen rows.

ENSILAGE CORN

WEST BRANCH SWEEPSTAKES. A very hardy variety, thriving in northern Pennsylvania where it is difficult to mature the ordinary ensilage Corn. Has yielded over 15 tons of green weight per acre. Stalks 10 to 12 feet high; ears 12 inches in length, with 14 to 20 rows. It has produced more than 150 bushels of ears per acre. Should be heavily fertilized to mature a desirable crop. Large quantities are grown in dairy sections for ensilage purposes. Matures for silage in 90 to 100 days.

LANCASTER COUNTY SURE-CROP. Lancaster County Sure-Crop holds first place in the estimation of many leading farmers. It is a yellow Corn; ears are very long and not proportionately thick. It grows quite tall, is very leafy and develops ears early. Some farmers claim that for husking purposes it is just as valuable a variety as it is for ensilage.

YELLOW SWEEPSTAKES. Large, broad, deep golden yellow grains; large ears at least 12 inches long. Very heavy yielder, producing 19 tons per acre in New York State tests and 24 tons in Rhode Island tests, and has averaged 64 bushels of Corn per acre. About 10 days earlier than white ensilage varieties.

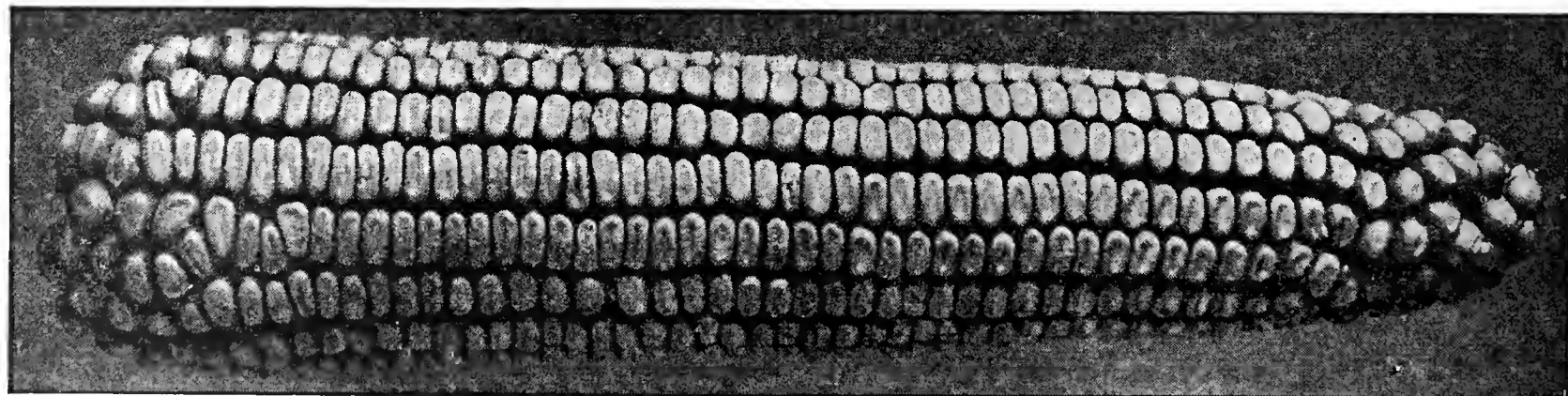
EUREKA. (Virginia-grown.) Virginia-bred Corn originated on the rich bottom of the James River Valley where it grows to perfection, often 16 to 18 feet high. It is a vigorous grower, with large stalks, unusually heavy foliage, and produces from one to three ears to the stalk, according to the land. The ears average about 11 inches in length.

BLUE MOUNTAIN. This Corn is grown at a high altitude in the Blue Ridge Mountains in Virginia, and makes an ideal ensilage Corn. Grows to a mammoth size, full of leaves, and has a big ear. It is a vigorous-growing Corn, often knee-high after 30 days from planting, and grows 14 to 16 feet high. Our seed is selected in the fall, properly taken care of, and always shows a nearly perfect germination test.

VIRGINIA HORSE-TOOTH. The popular fodder Corn of the Southern States; from 12 to 14 feet high, and stiff enough to stand up during severe storms. The seed is white, broad, and deep, with white cob.

RED-COB. A tall-growing plant, with a quantity of side leaves, making it desirable for ensilage. A favorite with a great many growers. The grain is narrow and clear white.

Write us for special prices and samples of Field Seeds and Grains. Specify quantities wanted



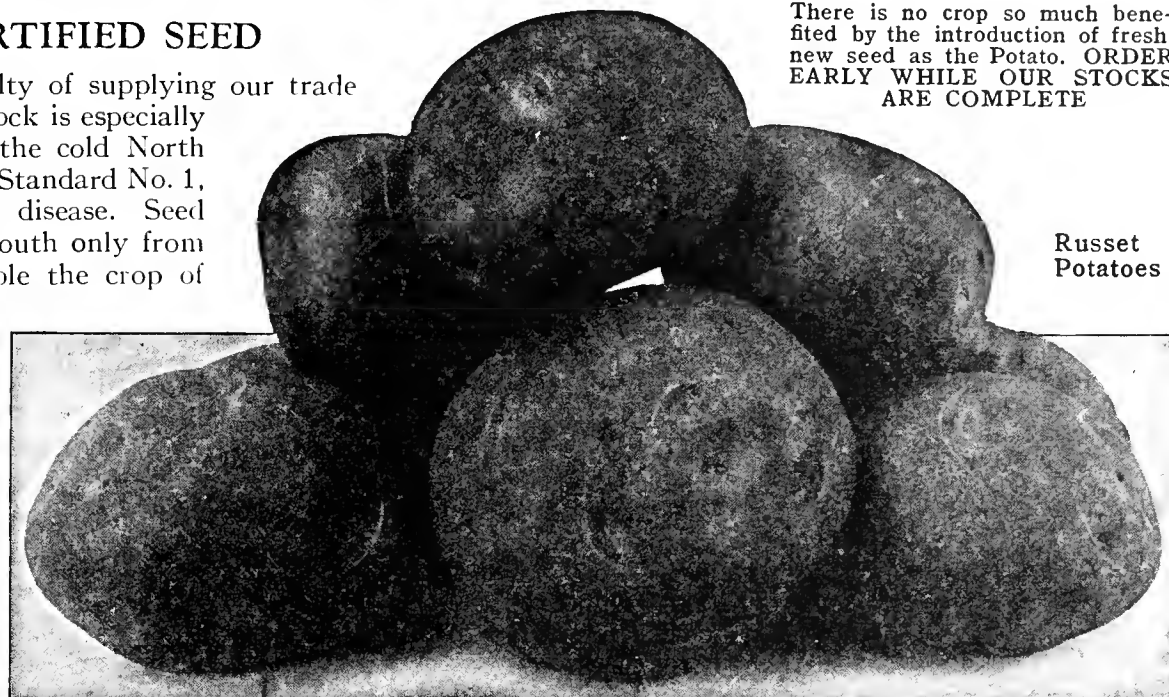
West Branch Sweepstakes Corn

SEED POTATOES

NORTHERN-GROWN CERTIFIED SEED

For many years we have made a specialty of supplying our trade with northern-grown Seed Potatoes. Our stock is especially grown for seed, by experienced growers in the cold North and Northwest, and is Certified Stock, U. S. Standard No. 1, high quality, true to type and free from disease. Seed Potatoes that are northern-grown, moved south only from 100 to 300 miles, frequently produce double the crop of home-grown seed.

We begin shipping Seed Potatoes as early in the spring as weather conditions will permit, usually the latter part of March. However, we urge our customers to place their orders early, while our stock of all varieties is complete. Owing to the perishable nature of Seed Potatoes the market is subject to radical changes, and it is impossible for us to quote prices at the time our Catalogue goes to press. Price-list sent on request.



Russet Potatoes

There is no crop so much benefited by the introduction of fresh, new seed as the Potato. ORDER EARLY WHILE OUR STOCKS ARE COMPLETE

EARLY VARIETIES

EARLY SIX WEEKS. (Certified.) A very early Potato, somewhat resembling the Early Ohio.

SPAULDING'S EARLY ROSE. (Certified.) A seedling of the Early Rose, with pink skin, pure white flesh, much stronger foliage and a better Potato than the Early Rose in every way.

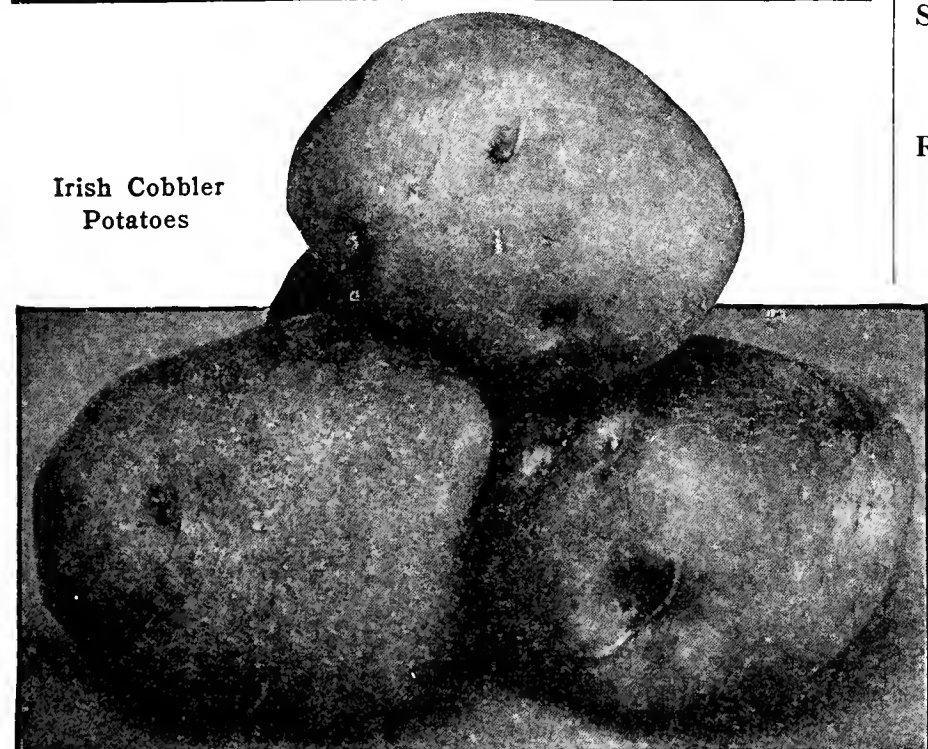
EARLY OHIO. (Certified.) A sort that is well known by market-gardeners who are after a first-early Potato for home trade; the tubers are almost round, with pink skin and of excellent quality.

IRISH COBBLER. (Certified.) An extra-early, round, white Potato. Vines yield heavily and the tubers are of extremely fine quality. An excellent all-round variety, either for the home-garden or growing commercially. About a week to ten days later than Early Ohio, but usually much more productive.

Price-list of Seed Potatoes furnished upon request

Treat Seed Potatoes with Du Bay Semesan Bel
See page 63

Irish Cobbler Potatoes



LATE VARIETIES

KATAHDIN. (Certified.) A handsome, shallow-eyed, glossy, white-skinned variety, originated by the U. S. Department of Agriculture, which matures a little later than Green Mountain, but earlier than the Rurals. It has very few tubers of unmarketable size and has all varieties beaten in uniformity of shape, size, and in general appearance. It does well on light, friable soil, but is not adapted to heavy soil subject to drought conditions.

RUSSET. (Certified.) An exceptionally heavy yielder. Table quality of the very best, with smooth, velvety, russet skin and shallow eyes. It is very fine-grained, cooks as white as flour, and is of splendid flavor; an excellent keeper and retains its good eating qualities until late in the spring. It is one of the hardiest varieties known. Its great productiveness, handsome color and resistance to diseases make it a very popular Potato and one especially suited to our locality.

CARMAN No. 3. (Certified.) Extra large, oblong, slightly flat, white. Vines are extra-good growers and yield an immense quantity of tubers of uniform size. One of the best late varieties; of excellent quality; good keeper.

SIR WALTER RALEIGH. (Certified.) The tubers vary from round to oblong in shape, uniformly of good size, white-skinned and of excellent quality. A good keeper, and, like Carman No. 3, a very heavy yielder.

RURAL NEW YORKER No. 2. (Certified.) The tubers are round to oblong, unusually large, white, eyes near the surface, and sets as a rule only two to four tubers per plant or hill, but usually all large ones.

IMPROVED GREEN MOUNTAIN. (Certified.) In the Improved Green Mountain we have a better Potato than was the old Green Mountain at its best. The tubers are uniform in shape, oblong, with two good ends, slightly flattened, creamy white skin, and pure white flesh of excellent quality.

Price-list of Seed Potatoes furnished upon request

Fertilizer. We recommend "Agrico for Potatoes" Fertilizer as excellent for Potatoes. See pages 56 and 57 for prices.

Potato Machinery. If you are interested in Potato Machinery, write for special catalogue giving detailed descriptions of Potato Planters, Diggers, and Sprayers.

AGRICO *The Nation's Leading Fertilizer*

With long, practical experience in manufacturing, as well as agricultural research, this company has developed its own special fertilizer formulas. For example, there is an **Agrico** specially made for corn, potatoes, wheat, tomatoes—and every important crop. Today, wherever crops are grown, **Agrico** is recognized as "The Nation's Leading Fertilizer." You'll never know how much your land really can produce until you use **Agrico**.

And **Agrico** has always contained "extra" plant-foods, the minor elements that impart tone and vigor to the growing plant. Like vitamins in the human diet, these extra elements increase the plant-feeding efficiency of the other plant-foods and offset known soil-deficiencies. So you get "two extra values" in **Agrico**—a special formula for each purpose, plus these extra plant-foods. Try **Agrico** this year and see the difference it can make.



Agrico for Lawns, Trees, and Shrubs (7-7-5)

Especially formulated for lawns, trees, and rapidly growing shrubs, where nitrogen deficiency is usually the limiting factor in growth. This special fertilizer is balanced with plenty of phosphorus and potash to insure healthy, vigorous growth instead of the weak, soft type so susceptible to fungous diseases.

5-lb. bag.....\$0 45	50-lb. bag.....\$2 50
10-lb. bag.....75	100-lb. bag.....4 00
25-lb. bag.....1 50	



Agrico for Gardens (4-10-4)

Formulated to stimulate deep root-growth, stiff stalk, and generous production of firm, compact flowers and vegetables. This well-balanced formula develops sturdy plants that successfully withstand many unfavorable growing conditions.

5-lb. bag.....\$0 45	50-lb. bag.....\$2 40
10-lb. bag.....75	100-lb. bag.....3 75
25-lb. bag.....1 40	



Agrico for Truck (5-10-5)

Specially formulated to meet the requirements of commercial truck growers. Produces quality truck crops, better yields, and early maturity. Getting quality truck crops to market early means premium prices to growers.

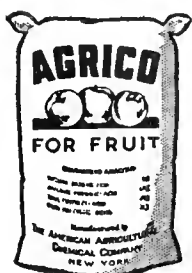
100 lbs.....\$2 60	1,000 lbs.....\$21 65
500 lbs.....11 55	2,000 lbs.....40 25



Agrico for Tomatoes (4-14-6)

Is specially formulated to do one job and do it better—that is, to grow top-quality tomatoes. Result, growers frequently sell their **Agrico**-grown tomatoes at premium prices.

100 lbs.....\$2 70	1,000 lbs.....\$22 20
500 lbs.....11 85	2,000 lbs.....41 40



Agrico for Fruit (9-6-6)

Provides an adequate supply of all the plant-foods needed at each stage of growth and imparts healthy tone and vigor that help ward off disease and help produce the best in each fruit variety.

100 lbs.....\$3 00	1,000 lbs.....\$25 20
500 lbs.....13 35	2,000 lbs.....47 35



Agrico for Corn (3-12-6)

A formula to give vigorous root-growth, sturdier stalks, ears filled out to the tip, larger yields, and better quality. Those extra plant-foods and a well-balanced formula do this job as reported by farmers everywhere.

100 lbs.....\$2 50	1,000 lbs.....\$20 45
500 lbs.....10 95	2,000 lbs.....37 85



Agrico for Potatoes (4-8-7)

The nation's leading seed-potato growers use **Agrico** because in test after test it produces more No. 1's of uniform size and quality—fewer seconds and mighty few culls. This brand is formulated especially to meet the requirements of potatoes in each potato-growing section.

100 lbs.....\$2 50	1,000 lbs.....\$20 55
500 lbs.....11 00	2,000 lbs.....38 05



Agrico for Grain (2-12-4)

For oats, barley, soy beans, small spring grains, alfalfa, and clover seedings, use this brand, specially made for the specific needs of these crops.

100 lbs.....\$2 30	1,000 lbs.....\$18 60
500 lbs.....10 05	2,000 lbs.....34 20



Agrico for Wheat (2-12-6)

Gives the crop a quick start, helping to insure against winterkill. Better stooling, with good vigorous growth from early spring to maturity assures plump, well-filled kernels to the tip of the stalk—meaning best-quality grain, which weighs more per bushel and usually brings a premium price.

100 lbs.....\$2 40	1,000 lbs.....\$19 35
500 lbs.....10 45	2,000 lbs.....35 70



Agrico for Pastures (7-6-6)

Reduce your feed-bill and increase profits by fertilizing pastures with **Agrico**. Earlier grazing. More cattle grazed on each acre. These, plus a higher mineral and protein grass, mean well-nourished healthy cattle. This is a real investment opportunity.

100 lbs.....\$2 75	1,000 lbs.....\$22 90
500 lbs.....12 20	2,000 lbs.....42 80

AGRICO is manufactured only by the American Agricultural Chemical Co.
129 Lewis St., Buffalo, N. Y.

“AA” QUALITY
FERTILIZERS

A record of performance extending back over nearly three-quarters of a century fairly entitles “AA Quality” Fertilizers to be called the nation’s standard crop-producers. Good crops depend on good fertilizer. It pays to use “AA Quality.”

“AA” RED SEAL (5-10-5)

In 100-lb. bags

100 lbs.....\$2 50	1,000 lbs....\$20 65
500 lbs.....11 05	2,000 lbs.... 38 25

“AA” PATHFINDER (4-12-4)

In 100-lb. bags

100 lbs.....\$2 45	1,000 lbs....\$19 80
500 lbs.....10 65	2,000 lbs.... 36 60

“AA” CLIMAX (3-12-6)

In 100-lb. bags

100 lbs.....\$2 40	1,000 lbs....\$19 45
500 lbs.....10 45	2,000 lbs.... 35 85

“AA” CHAMPION (2-9-5)

In 100-lb. bags

100 lbs.....\$2 15	1,000 lbs....\$17 05
500 lbs..... 9 25	2,000 lbs.... 31 05

16 Per Cent Superphosphate

In 100-lb. bags

100 lbs.....\$1 80	1,000 lbs....\$13 40
500 lbs..... 7 45	2,000 lbs.... 23 80

20 Per Cent Superphosphate

10 lbs.....\$0 50	50 lbs..... \$1 50
25 lbs..... 1 00	

In 100-lb. bags

100 lbs.....\$1 95	1,000 lbs....\$14 90
500 lbs..... 8 20	2,000 lbs.... 26 80

Nitrate of Soda

Fifteen per cent nitrogen, equivalent to over 18 per cent ammonia. 1 lb. 15 cts., 5 lbs. 40 cts., 10 lbs. 65 cts., 25 lbs. \$1.25.

In 100-lb. bags

100 lbs.....\$2 95	1,000 lbs....\$24 85
500 lbs.....13 15	2,000 lbs.... 46 65

Sulphate of Ammonia

20.5 Nitrogen. 2 lbs. 25 cts., 5 lbs. 40 cts., 10 lbs. 65 cts., 25 lbs. \$1.25.

In 100-lb. bags

100 lbs.....\$3 10	1,000 lbs....\$26 65
500 lbs.....14 10	2,000 lbs.... 50 25

Granular “Aero” Cyanamid

Granular Aero Cyanamid is a fertilizer carrying both *nitrogen* and *lime*. A 100-pound bag supplies 21 pounds of nitrogen and 70 pounds of hydrated lime.

May be applied early in the crop-season without danger of loss of its fertilizing value. Its nitrogen is yielded up to the plant as required. The lime of Aero Cyanamid is in a very active form.

100 lbs.....\$3 00	1,000 lbs....\$24 50
500 lbs.....13 00	2,000 lbs.... 46 00

Muriate of Potash

Imported, guaranteed 48 per cent K₂O. 1 lb. 15 cts., 5 lbs. 40 cts., 10 lbs. 65 cts., 25 lbs. \$1.25.

In 100-lb. bags

100 lbs.....\$2 75	1,000 lbs....\$22 90
500 lbs.....12 20	2,000 lbs.... 42 80

Sulphate of Potash

Forty-eight per cent potash. Generally used for acid-loving plants. Lb. 20 cts., 5 lbs. 50 cts., 10 lbs. 90 cts., 25 lbs. \$1.40, 50 lbs. \$2.25, 100 lbs. \$4.

Lawn and Garden Bone-Meal

Especially adapted for lawns, gardens, and greenhouses. Ground very fine. Nitrogen, 2.47 per cent; total Phosphoric Acid, 22.88 per cent.

5 lbs.....\$0 30	25 lbs.....\$1 10
10 lbs..... 50	50 lbs..... 2 00

In 100-lb. bags

100 lbs.....\$2 90	1,000 lbs....\$23 40
500 lbs.....12 50	2,000 lbs.... 43 80

Pure Raw Bone-Meal

Used for the same purpose as Lawn and Garden Bone-Meal, but not so quick in action. Nitrogen, 3.70 per cent; total Phosphoric Acid, 21.50 per cent.

In 100-lb. bags

100 lbs.....\$3 10	1,000 lbs....\$25 90
500 lbs.....13 75	2,000 lbs.... 48 75

Dried Blood

Generally used in greenhouses, rose and flower gardens, etc. A safe form of organic nitrogen.

5 lbs.....\$0 50	50 lbs.....\$3 25
10 lbs..... 90	100 lbs..... 6 00
25 lbs..... 1 75	500 lbs.....28 75

Cottonseed Meal

High in nitrogen and potash. Mostly used on lawns and golf greens.

25 lbs.....\$1 10	100 lbs.....\$3 00
50 lbs..... 1 75	

Larger quantities quoted on request.

Scotch Soot

Recommended both as a fertilizer and fungicide. Will produce color in flowering plants; also effective against grubs and worms that work near the surface.

5 lbs.....\$0 65	50 lbs.....\$3 00
10 lbs..... 1 00	100 lbs..... 5 50
25 lbs..... 1 75	

Horn Shavings

High in ammonia. Used principally in potting soil.

10 lbs.....\$1 25	50 lbs.....\$4 50
25 lbs..... 2 50	100 lbs..... 8 50

Aluminum Sulphate

Experiments have shown that soil acidity is required for rhododendrons, azaleas and all other evergreens. Apply at the rate of about one-half pound per square yard.

1 lb.....\$0 15	25 lbs.....\$1 40
5 lbs..... 50	50 lbs..... 2 25
10 lbs..... 75	100 lbs..... 3 75

Eisler’s Humus

An organic material used principally as a soil-conditioner and for mixing with potting soil. Recommended for lawns, flower-beds and gardens.

Small bag (about 10 lbs.).....\$0 45
Large bag (about 100 lbs.)..... 1 75
5 bags..... 6 50
10 bags.....11 00

Larger quantities quoted on request.

Unleached Hardwood Ashes

Indispensable for all crops requiring potash.

5 lbs.....\$0 25	500 lbs....\$12 50
25 lbs..... 90	1,000 lbs.... 23 50
100 lbs..... 3 00	2,000 lbs.... 44 00

Agricultural Gypsum

Agricultural Gypsum (land plaster) is an untreated, ground, natural rock fertilizer, consisting mainly of hydrated calcium sulphate. It therefore bears two essential plant-foods, calcium and sulphur. It is also used as a carrier of insecticides, such as paris green, calcium arsenate, etc.

Put up in 100-lb. paper bags

100 lbs.....\$1 50	1,000 lbs....\$10 50
500 lbs..... 6 00	2,000 lbs.... 18 00

Ask for booklet, “How and Why of Gypsum”

Bald Eagle Hydrated Lime

Available Calcium Oxide, 69.50
Available Magnesium Oxide, .85

Prepared especially for vegetable gardens, lawns, greenhouses, whitewash, and kindred uses, besides all the various other purposes for which Lime is essential. It corrects the sour condition which exists in many soils, especially those shaded by houses or trees. About 1 pound of Bald Eagle to each 30 square feet of garden ground or lawn is sufficient to sweeten the soil.

5-lb. bag...\$0 15	100 lbs....\$1 15
10-lb. bag... 25	500 lbs.... 5 75
25-lb. bag... 40	1,000 lbs....10 00
50-lb. bag... 65	2,000 lbs....17 00

Ask for delivered prices in carload lots

American Agricultural Limestone

Calcium Carbonate, 96.50
Magnesium Carbonate, 1.20

100 per cent passing 20 mesh; 70 per cent passing 100 mesh

Pure ground Limestone, artificially dried and very finely pulverized.

80-lb. bag...\$0 95	960 lbs....\$6 75
480 lbs..... 4 10	2,000 lbs....11 00

DELIVERY. Prices of fertilizer include local delivery in quantities of 50 pounds or more. On call orders and rail shipments an allowance will be made of \$1 from the 500-pound price, \$1.50 from the 1,000-pound price, and \$2 from the 2,000-pound price. Rail shipments F. O. B. cars, Pittsburgh. Quantities less than 50 pounds sent by Parcel Post at rates given on page 1 under “Parcel Post Shipments.”

CASH DISCOUNT. A discount of 5 per cent will be allowed on orders of 500 pounds and upward on all Fertilizers listed on this page, when cash is remitted with order, or when paid for at time of delivery.

Nitrophoska (15-30-15)

A concentrated complete fertilizer—containing all of the three essential plant-foods: 15% nitrogen, 30% phosphoric acid and 15% potash. Excellent for lawns and gardens. Early spring application produces strong, vigorous growth of rich green color. A 10-pound package is enough for 1,000 square feet.

1-lb. pkg. . . . \$0 25	25-lb. pkg. . . \$2 90
5-lb. pkg. . . . 95	100-lb. bag. . . 6 50
10-lb. pkg. . . . 1 60	

Floranid (Urea)

A very rich nitrogen fertilizer (46% nitrogen) used principally during the growing season to obtain more rapid growth, richer color of foliage, and greater brilliancy of bloom. A 5-pound package is enough for five monthly applications to 1,000 square feet.

1-lb. pkg. . . . \$0 25	25-lb. pkg. . . \$2 90
5-lb. pkg. . . . 95	100-lb. bag. . . 9 50
10-lb. pkg. . . . 1 60	

Ammo-Phos

A high-analysis fertilizer material carrying both nitrogen and phosphoric acid; is very effective as a fertilizer, particularly for lawns, gardens, and golf-courses. Contains 16 per cent nitrogen and 20 per cent phosphoric acid. In 100-lb. bags.

100 lbs. \$4 00	1,000 lbs. . . . \$36 00
500 lbs. 18 75	2,000 lbs. . . . 69 00

Milorganite

A specially prepared fertilizer, high in nitrogen, and so constituted as to retain its nitrogen over long periods. This assures a uniform and constant supply of this vital plant-food element throughout the season, which is so essential for fine sturdy grass.

In 100-lb. bags

100 lbs. \$3 00	1,000 lbs. . . . \$24 00
500 lbs. 12 75	2,000 lbs. . . . 45 00

Clay's Fertilizer

A well-known English fertilizer used principally on plants grown for exhibition.

7-lb. bag. . . . \$1 50	56-lb. bag. . . \$7 00
14-lb. bag. . . . 2 25	112-lb. bag. . 12 00
28-lb. bag. . . . 4 00	448 lbs. 44 00

The Sudbury Home Gardener's Soil-Test Kit

Simple, practical, easy to use. Tests for nitrogen, phosphorus, potash, and acidity. Contains enough material to make at least three separate tests for each element. The information will enable you to make intelligent adjustment of your soil to the requirements of your plants and grasses. Complete with instructions and data on plant needs, \$2.

Sudbury Horticultural Soil-Test Kit. Contains enough material for 60 individual tests. Complete, \$9.75.

Sudbury Professional Soil-Test Kit. Contains enough material for 200 individual tests. Complete in metal box, \$18.50.

Testing Fluid for Refill (Specify whether for nitrogen, phosphorus, potash, or acidity). 2 ozs. 75 cts., 6 ozs. \$1.50.

Why Your Garden Needs**PEAT G. P. M. MOSS**

G. P. M. Peat Moss is the finest grade, pure organic Peat Moss obtainable. It loosens heavy clay soils, gives body to sandy soils, it improves the texture of any soil; increases available fertility; stores up valuable moisture and water-soluble fertilizers for full use of plants. It aerates the soil and prevents hardening, and it promotes the development of vigorous root-growth—the secret of all luxuriant top-growth and beautiful flowers.

HOW TO USE G. P. M. PEAT MOSS

For Lawns and Gardens, mix moistened G. P. M. with the soil to a depth of 8 inches—about 1 bale to every 150 square feet—then add fertilizer and seed in the usual manner.

As a Protective Mulch against extreme heat of summer and freezing blasts of winter, spread G. P. M. around base of plants to a depth of 3 to 4 inches.

1/2-bus. bag, 30 cts.; 1-bus. bag, 50 cts.; 1/4-bale sack, \$1.35, not prepaid. Large bale, \$3.25; 5-bale lots, \$3.15 per bale. Delivery prepaid in Pittsburgh and suburban districts

SORBEX MOSS PEAT. Made from selected high-quality Moss Peat, ground 25 times finer than ordinary peat moss. Ideal for top-dressing and potting-soil mixtures; corrects hard baked condition of turf. Bag containing 10 bus. material when loosened, \$3, 5 bags \$14.50, 10 bags \$27.50.

Vigoro**Specially Prepared Plant-Food**

For Lawns, Gardens, Flowers, Shrubbery, Trees

Vigoro is specially prepared to supply lawns, gardens, flowers, shrubbery, and trees with all of the plant-food elements needed for rapid, sturdy, and luxuriant growth.

Vigoro is clean, odorless, and easy to apply. It can be sown by hand, like grass seed.

Start right this year by using hardy, disease-free seeds and **Vigoro**. Your success in gardening will be assured. Complete directions in every bag.

1-lb. pkg. . . . \$0 10	50-lb. bag. . . \$2 50
5-lb. pkg. . . . 45	100-lb. bag. . . 4 00
10-lb. pkg. . . . 85	500 lbs. 18 00
25-lb. bag. . . . 1 50	

Soil-Prep

Soil-Prep is rich in humus, and approximately ten times as effective as the average barnyard manures. It is entirely free from weed seeds and unpleasant odor and contains no filler. Apply at the rate of from 2 to 6 pounds per 100 square feet, depending on the condition of soil.

5-lb. bag. . . . \$0 30	50-lb. bag. . . \$1 85
10-lb. bag. . . . 50	100-lb. bag. . . 3 25
25-lb. bag. . . . 1 00	500 lbs. 14 50

Plantabbs

To keep house-plants looking lovely feed them **Plantabbs**, the balanced, complete food in clean, odorless, concentrated, convenient TABLETS.

Prices, postpaid: 30 tablets 25 cts., 75 tablets 50 cts., 200 tablets \$1, 1,000 tablets \$3.50.

Stim-U-Plant

A clean, odorless, and complete plant-food for potted plants, window-boxes, etc. It is applied to plants when, where, and as needed.

Prices, postpaid: 10 tablets 10 cts., 30 tablets 25 cts., 100 tablets 75 cts., 500 tablets \$2.50, 1,000 tablets \$3.50.

AGRICO Country Club Fertilizer

To meet the exacting requirements of both putting-greens and fairways, fertilize with **Agrico**. These brands are designed to encourage a good growth of dark green, springy, luxuriant turf, which will stand both the use and abuse to which putting greens and fairways are subjected.

Both contain 50 per cent organic nitrogen.

For Fairways (6-8-2)

100 lbs. \$3 70	1,000 lbs. . . . \$31 50
500 lbs. 16 65	2,000 lbs. . . . 56 00

For Putting-Greens (8-6-2)

100 lbs. \$3 90	1,000 lbs. . . . \$33 20
500 lbs. 17 55	2,000 lbs. . . . 60 00

Adco

Adco is the powder that when mixed with straw, stalks, leaves, cuttings, garden waste of any kind, turns it into manure. This **Adco** Manure is *real* manure, identical chemically and in fertilizing power with the old-fashioned kind, but much cleaner.

7 1/2-lb. bag (enough to treat about 100 pounds of dry material), \$1.

25-lb. bag (enough for 12 wheelbarrow loads of garden waste, making 1/2 ton of manure), \$2.

150-lb. bag (enough for a heap 10x10x6 ft., making about 3 tons of manure), \$10.50.

The modern and quick way to apply fertilizer to your lawn. It will save its cost in one season's use. Made of strong fiber-board paper with wooden handle. Wheels protected by iron tires. Shipped knocked down. Easily assembled. Price, 60 cts., postage 15 cts. extra.





2 lbs.....	\$0 20
5 lbs.....	30
10 lbs.....	50
25 lbs.....	1 00
50 lbs.....	1 75
100 lbs.....	3 00
500 lbs.....	12 50
1,000 lbs.....	22 50
2,000 lbs.....	42 00
CATTLE MANURE	
Same price as Sheep Ma-	
nure. Delivery: Refer to	
bottom of page 57.	

Triple Action Plant Foods

For Lawns and Flowers

Shrubs, Trees and Vegetables

You get added value and greater effectiveness from Wizard Natural Plant Foods because of these three distinctive and important features:

- 1. All Plant Food Elements.**
Wizard supplies in a safe natural form all the elements needed to make plants thrive.
 - 2. Soil Building Humus.**
Humus is a vital need of all soils and is supplied in abundance by Wizard. Humus is only supplied by Natural Organic Plant Foods.
 - 3. Beneficial Bacterial Action.**
The vast store of plant food locked-up in all soils is liberated and made available to plants by the bacterial action that Wizard promotes.
- Wizard improves the physical condition and puts new life into worn-out soils. It is safe, absolutely weedless and lasting in effect.

Lawns.
Six to ten pounds to 100 sq. ft. in Spring and Fall will produce a thick green turf.

Flowers.
A handful mixed with soil under each new plant or 10 lbs. to 100 sq. ft. of bed area will insure luxuriant green foliage and an abundance of bloom.

Vegetables.
Wizard promotes quick, tender growth of high quality vegetables. Apply in hill or row or broadcast at rate of 6 lbs. to 100 sq. ft.

Shrubs and Trees.
The lasting qualities of Wizard make it the ideal food for trees and shrubs. It releases plant food continuously over a long period.

Nature's Perfect
Soil Builders

Sheep and Cow Manures

STERILIZED CONCENTRATED WEEDLESS

Lōma

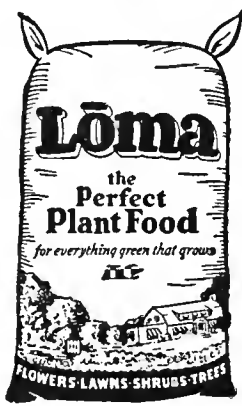
The Perfect Plant Food

for Everything Green that Grows

FAMOUS for QUALITY

Makes Lawns and Gardens Thrive

Your garden and lawn need an easily digested and lasting diet if they are to repay your efforts and live up to your expectations—and the best food you can give them is Loma. Feed Loma, and in a short time your lawn will become a closely woven carpet of rich emerald-green . . . your flowers will be more colorful and longer-lasting . . . your vegetables will be meatier and more flavorful . . . your fruit



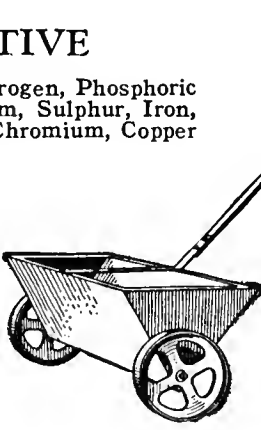
trees will yield more abundantly . . . and your shade trees will be healthier and more handsome. Loma not only contains the three essentials—Nitrogen, Phosphoric Acid, and Potash—but all of the essential rarer elements as well.* Every ounce of Loma is readily absorbed and digested by the plant roots.

Loma is clean, odorless, economical . . . easy to use, handle or store. Insure your lawn and garden an even, sturdy growth throughout the season by feeding Loma.

*COMPLETE AND 100% EFFECTIVE

In addition to LOMA'S scientifically balanced ration of Nitrogen, Phosphoric Acid and Potash, it contains Manganese, Magnesium, Calcium, Sulphur, Iron, Zinc, Boron, Chlorine, Carbon, Aluminum, Titanium, Sodium, Chromium, Copper and other Elements essential to plant-growth.

1-lb. can.....	\$0 10
5-lb. can.....	45
10-lb. bag.....	85
25-lb. bag.....	1 50
50-lb. bag.....	2 50
100-lb. bag.....	4 00
500 lbs.....	18 00



LōMA SPREADERS

Loma Spreaders are sturdily built and easy to operate. They spread Loma evenly and accurately, as well as grass seed and other granular materials of similar consistency. They are equipped with force feed agitators and patented automatic shut-off controls.

Model	Capacity	Price
14-in. Junior.....	18 lbs.....	\$2 50
16-in.....	36 lbs.....	5 50
36-in.....	75 lbs.....	10 50
24-in.†.....	65 lbs.....	12 50
30-in.†.....	100 lbs.....	17 25

†Heavy Duty Model for golf courses, large estates, landscape gardeners, etc.

Other Fertilizer Spreaders shown on pages 58 and 70

Insecticides and Fungicides

The Insecticides and machines for applying them, described in this Catalogue, are not novelties in the experimental stage, but have been thoroughly tested and found reliable for the uses for which they are intended.

Customers using large quantities of Insecticides are requested to write to us for special prices, specifying the quantities wanted. Prices quoted are subject to change.

TO CONTROL CHEWING AND SUCKING INSECTS

Bowker's Powdered Arsenate of Lead

Can be used either as a spray or as a dust for all external chewing insects. It will not burn or injure your crop. It is the fineness of Bowker's Arsenate of Lead that causes it not only to spread and to stick better, but to kill better. Mixes easily, stays well in suspension, with no trouble from clogged nozzles.

1-lb. pkg. 35 cts., 4-lb. pkg. 85 cts., 24-lb. pkg. \$4.90, 96 lbs. (4 24-lb. pkgs.) \$18.60.

Bowker's Calcide High-grade Calcium Arsenate

Excellent for potatoes and truck crops; it is cheaper than lead arsenate. Use Calcide to kill such pests as potato bugs, bean beetles, and other leaf-chewing insects. Calcide may be applied either wet or dry.

1-lb. pkg. 25 cts., 4-lb. pkg. 55 cts., 48 lbs. (12 4-lb. pkgs.) \$5.25.

Paris Green

1/4-lb. carton. \$0 20
1-lb. carton. 60
5-lb. carton. 2 50

Dow's Magnesium Arsenate

Dow's Magnesium Arsenate is an effective insecticide for the control of the Mexican bean beetle and other chewing insects. It proves fully effective without damage to tender bean foliage. As a spray, use 6 teaspoonfuls to 1 gallon of water. For dusting, use 1 part Magnesium Arsenate to 3 parts hydrated lime. 12-oz. can 40 cts., 2-lb. bag 65 cts., 100-lb. drum \$22.50.



Pyrox

TRADE MARK REGISTERED

Kills Bugs—Prevents Blights

All you have to do to keep your farm crops free from leaf-chewing insects and fungous diseases is this: Mix Pyrox with water and spray. No need to waste time and effort mixing Bordeaux and arsenicals. It makes a fine mist and covers the foliage completely, sticking to the leaves even through the hardest rains.

Pyrox is especially recommended for potatoes. Thorough and frequent spraying will keep the vines healthy. Even when insects and diseases are not troublesome, Pyrox will stimulate the growth of the vines and increase yields. One pound makes 4 to 6 gallons of spray.

25 lbs. \$5, 50 lbs. \$7.25, 100 lbs. \$12.50, 300-lb. barrel \$30.

Hammond's Slug-Shot

Non-Poisonous Insecticide

Hammond's Slug-Shot is used from ocean to ocean. A light, composite, fine powder, it is easily distributed either by dusters, bellows, or in water and sprayed. It is thoroughly reliable in killing the cabbage worm, bean beetle, and other leaf-chewing insects.

Lb. 25 cts., 5 lbs. \$1, 25-lb. bag \$3.

Liquid Slug-Shot

Stabilized Pyrethrum and Rotenone

A highly concentrated spray effective against both leaf-eating and sucking insects. It is also a fungicide and helps prevent fungous growths, such as mildew and black-spot. Non-poisonous and absolutely harmless to man, pets, and birds. One ounce makes 6 gallons of spray.

Oz. 35 cts., 6 ozs. \$1, 16 ozs. \$2.25, qt. \$4.

Grasselli's Dutox Barium Fluosilicate

A Control for Mexican Bean Beetle and Other Pests

Thousands of practical farmers endorse Dutox as an effective control for beetles and leaf-eating insects on vegetables, fruit, etc. They know by experience that Dutox means crop protection. It does not injure plants nor impair fertility of the soil. Used as a dust, it is applied either alone or diluted with inert ingredients, or it may be applied as a spray.

1-lb. bag . . . \$0 35 | 6-lb. bag . . . \$1 35
Case, six 6-lb. bags. 6 84

Powdered Hellebore

1/2-lb. box . . . \$0 35 | 1-lb. box . . . \$0 60

Black-Leaf 40

Recommended by experiment stations and by spraying experts throughout the United States and the Dominion of Canada.

The standard contact insecticide for spraying vegetables, fruits, flowers, and plants to destroy aphids, thrips, leaf-hoppers, and similar "sucking" insects. Also effective for dipping purposes. One ounce makes 6 gallons of spray.

1-oz. bottle . . \$0 35 | 2-lb. can . . \$3 25
5-oz. can . . . 1 00 | 5-lb. can . . 5 85
1-lb. can . . . 2 25 | 10-lb. can . . 10 60

Rotecide Spray

Rotecide kills red spiders, cyclamen mites, mealy bugs, cabbage worms, beetles, thrips, aphids (plant-lice), and various other insects unusually difficult to control. Rotecide is non-poisonous to birds, animals, or humans. It is a complete spray; simply add water.

1-oz. bottle . . \$0 35 | 1-qt. can . . \$3 00
8-oz. bottle . . 1 00 | 1-gal. can . . 8 00
1-pt. can . . . 1 75 | 5-gal. can . . 35 00

Hammond's Rotenone Dust

A general-purpose Rotenone Dust that controls the Mexican bean beetle and most species of aphids, thrips, leaf-worms, beetles, larvæ, and other sucking and leaf-eating insects on vegetables, flowers, small fruit, etc. Does not contain arsenic. Requires 4 to 12 pounds to the acre.

Lb. 30 cts., 5 lbs. 75 cts., 25 lbs. \$3.50, 50 lbs. \$6.50, 100 lbs. \$12.50.

Nursery Volck

Ornamental shade trees, shrubs, conifers, and greenhouse plants require a great deal of care to preserve their natural beauty and vigor. Spraying with contact insecticides is the only satisfactory means of controlling the sap-sucking insects such as scales, mites, aphids, mealy bugs, white flies, thrips, leaf-hoppers, red spiders, etc. Especially adapted to nursery, greenhouse, and shade-tree spraying.

1/2-pt. can . . . \$0 35	5-gal. can . . \$6 25
1-qt. can . . . 75	14-gal. can . . 14 00
1-gal. can . . . 2 00	28-gal. drum. 25 20

Wilson's O. K. Plant Spray

A powerful, yet safe and efficient insecticide for general outside or greenhouse use. Positive control for most insects commonly found attacking flowering plants, shrubs, and ornamentals.

1 qt. \$1 00	10 gals. . . . \$22 00
1 gal. 3 00	30 gals. . . . 57 00
5 gals. 12 00	50 gals. . . . 90 00

Hammond's Grape and Rose Dust

Black-spot on roses, powdery mildew on grapes and flowers, blights, leaf-eating insects—all vanish after the use of Hammond's Grape and Rose Dust. A combined fungicide and insecticide used by professional growers for over a half century.

1-lb. can 35 cts., 5-lb. can \$1.25.

Pomo-Green With and Without Nicotine

A Leaf-green ALL-IN-ONE Dust or Spray

Pomo-Green prevents and controls black-spot, mildew, chewing insects and sucking insects on plants, shrubs, and roses quickly and effectively.

Protect new growth by dusting or spraying with Pomo-Green once each week throughout the growing season.

Pomo-Green with Nicotine. The all-in-one material. 1-lb. can 75 cts., 5 lbs. \$3.

Pomo-Green without Nicotine. Used to control diseases and leaf-eating insects only. 1-lb. can 50 cts., 5-lb. carton \$1.75.

DX PYRETHRUM SPRAY. See page 66.

NICOTINE PYROX. See page 65.

RED ARROW. See page 65.

To Control Fungus, Mildew, Black-spot, and Rust



Bowker's Powdered Bordeaux Mixture

A powerful fungicide for the control of blights, rusts, and rots on any crops where Bordeaux is recommended by the experiment stations or other agricultural authorities. Fine, light, and fluffy, Bowker's Bordeaux mixes easily and completely. Hence it covers evenly and sticks well to the foliage. When bugs or worms are present, use Bowker's Pyrox in place of Bordeaux, as Bordeaux contains no poison. 1-lb. pkg. 30 cts., 4-lb. bag 80 cts., 48 lbs. (12 4-lb. pkgs.) \$8.25.

Bowker's Monohydrated Copper Sulphate

For use in all home-mixed dusts requiring Copper Sulphate. Contains approximately 35 per cent Metallic Copper. 12½-lb. bag \$1.85, 100-lb. drum \$12.50.

"Bell-Mine" Rotary Kiln Lime

Used in spraying mixtures. Endorsed by leading agricultural authorities for Bordeaux Mixtures and for all other home-mixed insecticides and fungicides. Furnished in either pulverized, pebble, or lump form. 180-lb. steel pkg. \$2.90. Larger quantities quoted on request.

Superfine Dusting Sulphur

Controls mildew, black-spot, leaf-spot, and other fungous diseases on roses, chrysanthemums, phlox, delphiniums, snapdragons, and many other plants. 3-lb. sifter carton 40 cts., 10 lbs. 75 cts., 25 lbs. \$1.50, 50 lbs. \$2.50, 100 lbs. \$4.50.

Dow "Mike" Wettable Sulphur

Goes into suspension instantly and used as a spray. 10-lb. bag \$1.35, case (6 10-lb. bags) \$7.25.

Copper Sulphate (Blue Vitriol)

For making Bordeaux Mixture solution. Lb. 20c., 5 lbs. 75c., 10 lbs. \$1.25, 50 lbs. \$5, 100 lbs. \$9, 450-lb. bbl. \$36.

Tri-ogen The all-purpose spray

Tri-ogen gives complete protection against all plant insects and diseases. It is especially recommended as a rose-garden spray treatment for mildew and black-spot. Tri-ogen will control almost every insect pest and disease that attacks the rose. It is harmless to foliage or blooms and the fact that it does three separate jobs in one spraying is, perhaps, the reason for its great and ever-increasing popularity. A Small Kit...\$1 50 | C Large Kit...\$6 00
B Medium Kit 4 00 | D Estate Kit. 20 00

Sulfocide

A concentrated liquid sulphur fungicide for vegetables, flowers and fruits. Ask for complete leaflet. (See also page 66.)

1-pt. can....\$0 50 | 1-gal. can....\$2 25
1-qt. can.... 85 | 5-gal. can.... 7 50

Fungtrogen

A preventive and remedy for mildew, black-spot, and other fungous diseases.

4 ozs.....\$0 45 | 1 qt.....\$2 00
½pt..... 75 | 1 gal..... 6 00
1 pt..... 1 25

Dormant Sprays for Control of Scale

Scalecide

Scalecide has proved to be the most effective and safest oil spray for insects and fungous diseases that pass the winter on trees, evergreens, shrubs, and vines. For further description see page 66.

1-qt. can....\$0 65 | 5-gal. can...\$5 75
1-gal. can.... 1 55 | 15-gal. drum. 13 25

Sunoco Self Emulsifying Spray Oil

Scale insects include some of the most dangerous enemies of horticulture. They are small, but propagate so rapidly that neglected trees quickly become incrustated with them. Do not allow these scales to gain a foothold. Sunoco applied as a dormant spray will control most all kinds of scale.

Rusty evergreens, caused by red spider, may be prevented by using Sunoco Spray in May or June.

15-gal. drum. \$10 50
1-gal. can...\$1 25 | 30-gal. drum. 12 90
5-gal. can... 5 25 | 55-gal. drum. 19 25

Bowker's Liquid Lime Sulphur Concentrated

Prepared from the highest grade of lime and the purest sulphur, combined in especially designed apparatus and in quantities so large as to allow plenty of time for storage and settling. Thus, the solution which reaches you is cherry-red in color, clear and sparkling. It will not crystallize, thicken up in the barrel, or clog the finest nozzles. If used according to directions, Bowker's Lime Sulphur will kill every scale that it touches.

1-qt. can 55 cts., 1-gal. can \$1, 5-gal. can \$3.25, 30-gal. bbl. \$8, 50-gal. bbl. \$10.50.

F.O.B. our warehouse, 30-gal. bbl. \$7.20, 50-gal. bbl. \$9.50, 3 50-gal. bbls. \$27. Containers not returnable.

Agricultural Sulphur

Especially prepared for making Lime Sulphur solution. 99½ per cent pure, 60 per cent through 40 mesh. 100 lbs. \$3.10, 500 lbs. \$14, 1,000 lbs. \$26.50, 2,000 lbs. \$48.

Bowker's Dry Lime Sulphur



Bowker's Dry Lime Sulphur is made by a special patented process which keeps the product in good physical condition, thus insuring its going into suspension quickly. It is used either as a dormant spray to kill scale or as a summer spray to control fungous diseases such as scab, rot, etc. 1-lb. pkg. 35 cts., 5-lb. pkg. \$1.50, 12½-lb. bag \$1.75, 100 lbs. (8 12½-lb. bags) \$11.75, 200 lbs. (16 12½-lb. bags) \$22.50.

Stewart's Lime Sulphur Hydrometer

Gives specific gravity and Baumé readings. Complete with test-jar. \$1.25, postage 25 cts. extra.

ASK FOR THE HANDY SPRAY GUIDE.

Greenhouse Insecticides and Fungicides

Nico-Fume Pressure Fumigator

Nico-Fume Powder packed in hermetically sealed cans. An effective greenhouse fumigant to destroy aphids, thrips, midges, etc. ½-lb. tins, 45 cts. each, \$2.40 for 6, \$4.20 per doz.

1-lb. tins, 75 cts. ea., \$3.75 for 6, \$7 per doz.

Nico-Fume Liquid

A highly refined solution of free nicotine, guaranteed to contain fully 40 per cent of nicotine. Extensively used for spraying or vaporizing in greenhouses to destroy aphids, thrips, etc.

1-lb. tin \$2.25, 4-lb. tin \$5.75, 8-lb. tin \$10.

DELIVERY: Refer to bottom of page 64

Nico-Fume Tobacco Paper

Consists of sheets of paper impregnated with high-strength nicotine, folded and punched, ready to hang up and burn. Guaranteed to contain not less than 20 per cent of nicotine. 24 sheets \$1.25, postpaid \$1.40; 144 sheets \$4.50, 288 sheets \$8.

Selocide for Red Spiders

This selenium insecticide is extremely effective against red spiders, killing not only the spiders but their eggs as well. Will also do a good job in controlling mildew. One properly made application will clean up a serious infestation. Easy to mix.

1-qt. can...\$1 10 | 10-gal. drum. \$24 50
1-gal. can... 3 00 | 30-gal. drum. 58 50
5-gal. can... 13 50

Lethane 440

Particularly recommended for the control of chrysanthemum midges, white fly, thrips, scale insects, orthezia, and red spider, as well as mealy bugs.

2-oz. bottle...\$0 35 | 1 qt.....\$3 00
6-oz. bottle.. 1 00 | 1 gal..... 8 50
1 pt..... 2 00 | 5 gals..... 35 00

CYANOGAS G. Fumigant. Fine for greenhouse and mushroom-house fumigation. In the greenhouse, ¼ ounce per 1,000 cubic feet will control aphids, white fly, soft scale, thrips, and other greenhouse pests. (Booklet on request.)

5-lb. tin...\$3 00 | 100-lb. drum \$25 00
25-lb. tin... 10 00 | Not mailable.

Wilson's O.K. Plant Spray. See page 60.

To Control Ants, Moles, Rats, Mice, Groundhogs, Etc.

Terro Ant Killer

Will drive ants in 24 hours from pantries, refrigerators, plants, flowers or any other place infested with them. A clean preparation in syrup form that cannot be blown into food or about the house and can be used without soiling or discoloring floors or receptacles. Terro is guaranteed to do the work or money back. Small size 25 cts., large size 50 cts. Postage 10 cts. extra.

Antrol Ant Killers

Antrol is easy to use, economical, and safe around children and pets. It consists of small glass containers from which the worker ants carry Antrol Syrup to their nests for food. The whole ant family is quickly killed at the source—the only way to get permanent freedom from these pests.

The containers may be refilled and used year after year. Adapted to any size home or garden. Guaranteed.

Antrol Regular Set consists of 4 patented glass containers with rustproof aluminum lids, and one 4-oz. bottle of Antrol Syrup. Especially recommended for homes, estates, gardens, etc. May be used inside or out. 75 cts. per set. Postage 10 cts. extra.

Antrol Ready-Filled Set consists of 4 special glass "feeders" containing regular Antrol Syrup. Ideal for use in apartments, homes, camps, yards, etc. 40 cts. per set. Postage 10 cts. extra.

Antrol Syrup. 4-oz. bottle 35 cts., pt. 85 cts., gal. \$3.50.



Remo Roach Destroyer

Will destroy roaches and other insects in a few minutes. 8-oz. pkg. 55 cts., 1-lb. pkg. \$1.

Hammond's Weed Killer

Hammond's Weed Killer has been in use for many years, to prevent the growth of weeds. Will, naturally, kill any kind of vegetation without distinction, so it must be used cautiously where grass is desired. Dilute 1 gallon to 30 or 40 gallons of water. Qt. 50 cts., gal. \$1.50, 5 gals. \$6.25, 30-gal. drum \$30.

Adco Weed Killer

By its use it is possible to eliminate weeds, such as dandelions, plantains, etc., in the lawn without injury to the grass. It is a scientific product, the outcome of years of experiment, and will do all that is claimed for it. Non-poisonous and easy to use. One pound is enough for 100 square feet. 3-lb. can 95 cts., 25-lb. bag \$4.



Cyanogas Ant-Killer

Ants die instantly when you drop a little Cyanogas Ant-Killer into the entrance to the nest. It is simple and sure. The gas does the work—penetrates all through the nest. 4-oz. tin 30 cts. (Not mailable.)

Magikil Jelly (Ant Bait)

A jelly bait that needs no feeders or traps. Simply place small doses in infested areas. Does not melt at ordinary temperatures. Endorsed by many state experiment stations. Garden tube 35 cts., estate tube 85 cts.



Carbon Disulphide

Recommended for killing ants, moles, woodchucks, and ground squirrels. For ants in hills, punch holes at intervals of 10 inches and pour a tablespoonful in each hole, then cover with burlap or similar covering. 1-lb. tin 60 cts. (Not mailable.)

CYANO GAS

Cyanogas A Dust is acknowledged throughout the world to be the most effective pest destroyer. It is Calcium Cyanide which liberates hydrocyanic-acid gas when exposed to the natural moisture in the air and kills the pests wherever they are. They merely breathe the gas and die instantly. Effective for the extermination of moles, groundhogs, rats, mice, ants, fleas, wasps, and various other pests.

½-lb. tin...	\$0 45	25-lb. tin...	\$10 00
1-lb. tin....	75	100-lb. drum.	25 00
5-lb. tin....	3 00		Not mailable.

Weed Killers

Atlacide

A Non-Poisonous Weed Killer in Powder Form

Will exterminate all undesirable vegetation including Poison Ivy, Canada Thistle, Johnson Grass, etc., without danger of poisoning humans or animals. Especially recommended for obtaining weed-free driveways, paths, tennis-courts, and gutters. A pound will kill about 100 square feet of weeds.

5-lb. tin....	\$1 50	50-lb. drum.	\$6 75
15-lb. drum..	3 00	100-lb. drum.	12 50

Dandelion Killer

Quickly removes Dandelions from your lawn. It draws water from leaf and root until the whole plant is destroyed. Applied in the crown of the plant. Non-poisonous. 1-lb. can 35 cts.

Little Giant Self-setting Mole Trap

A durable Trap made of steel and heavily tinned. Easily set and a sure method of eliminating this pest.

16½ inches in height over all, 4⅝ inches wide, made of ⅝-inch band steel. Price \$1 Postage 20 cts. extra.



Mo-Lo

A preparation for the extermination of moles. The smell of MO-LO attracts the moles, they eat it and die underground. Poisonous. Pkg. (1 doz. tablets) 25 cts., doz. pkgs. \$2.75.

K-R-O KILLS RATS WITHOUT POISON

K-R-O is made of red squill, an ingredient recommended by the U. S. Government as sure death to rats and mice, but which will not kill anything else. 2-oz. size, 75 cts.; 4-oz. size, \$1.25; 8-oz. size, \$2. K-R-O Ready Mixed. 6-oz. size, 35 cts.; 22-oz. size, \$1, postpaid.

Pastoxine

Non-Poisonous. Guaranteed to Kill Rats

Is absolutely harmless to human beings, domestic animals, and poultry.

As little as 2 grains will kill a rat in from two to six hours, and it will go out in the open to die, thus eliminating all odors.

Pastoxine is approved by boards of health of leading cities and by the U. S. Department of Agriculture as not a misbrand. 1-oz. jar, 60 cts., postpaid.

Mouse Seed

Safer and more convenient than traps or any paste or powder preparations. Ready to use. No bait, no muss. 25 cts., postpaid.

Dan-D-Lion Killer Kemical

Amazing new way to eradicate dandelions and other ugly lawn weeds. Kills roots completely for all time. Wonderfully quick, easy method—merely touch the dandelion with No-Stoop Applicator and the entire plant dies, dries up and blows away. Starts turning weed black within one hour after application.

Combination Outfit (No-Stoop Applicator and 1 qt. Kemical)....\$1 95

KILLER KEMICAL.

1-qt. can.....	\$1 05
½-gal. can.....	1 45
1-gal. can.....	2 35
5-gal. can.....	9 85
10-gal. drum.....	18 50
30-gal. drum.....	48 00
No-Stoop Applicator	\$1.25.



Seed and Soil Disinfectants and Seed Inoculation

Reduce grain-disease losses and increase yields with

New Improved Ceresan

Use this dust treatment on seed wheat, oats, and barley to reduce seed-borne disease, step-up your yield, increase your profit. Tests by experiment stations prove its power against smut of barley, loose and covered smuts of oats, stinking smut of wheat, and seedling blight of all three. Increased yields repay its small cost many times. Easily dusted on seed grain as directed. One pound treats 32 bushels.

Lb. 70 cts., 5 lbs. \$3.

Make sure of a better corn yield by treating seed with

Semesan Jr.

Seed-corn treatment with Semesan Jr. amounts to *real crop insurance*. At the extremely low cost of 1½ cents an acre, it reduces seed rotting, checks seedling blight and certain seed-borne rots of root and stalk—gives corn the healthy start necessary for a big yield. Treats both seed field and sweet corn by the quick, easy dusting method. Only 2 ounces needed per bushel.

4 ozs. 30 cts., lb. 75 cts., 5 lbs. \$3.25, 25 lbs. \$14.

Corrosive Sublimate

Mercuric Chloric, Bichloride of Mercury

Recommended for the control of large brown-patch in bent grasses, also prevents damping-off of vegetable and flower seedlings.

¼-lb. bottle 75 cts., 1-lb. bottle \$2.10, 5-lb. bottle \$9, 25-lb. box \$38.50. (Not mailable.)

Calogreen

Calomel, Mercurous Chloride

Used extensively in the control of small brown-patch.

Lb. \$2.75, 5 lbs. \$12, 25 lbs. \$52.75.

Cuprocide Red Copper Oxide

Recommended to prevent seed-decay and damping-off. It assures profitable stands even under adverse conditions.

Cuprocide can be used on both vegetable and flower seeds—simply shake a small portion together with the seed. This is a safe and very cheap treatment.

4-oz. can 35 cts., lb. 90 cts., 5 lbs. \$4.

Terogen

Destroys the spores of fungi of most diseases that have fallen to the ground, as well as the larvæ of most insects. Makes sturdy, healthy foliage and helps to prevent chlorosis. Recommended as a summer-autumn ground-dressing and soil-disinfectant for rose-beds.

Lb. 75 cts., 2 lbs. \$1.25, 5 lbs. \$2.75, 25 lbs. \$11.



DISINFECTANTS

Lower costs and better potato yields with

Improved Semesan Bel

Closely checked tests have proved that any potato grower can usually expect better returns from his seed if he treats it with Semesan Bel before planting. At an average cost of 21 cents an acre this quick dip treatment—by reducing seed piece decay and seed-borne scab and rhizoctonia—increased the average yield 13.6%. Result—lower growing cost and more profit! No mussy soaking. Treat your seed as fast as you can dip it. One pound treats 60 to 80 bushels of seed—easily, quickly, inexpensively.

4 ozs. 45 cts., lb. \$1.50, 5 lbs. \$6.75, 25 lbs. \$31.

Napthalene Flakes

Used principally to kill thrips on gladiolus bulbs in storage during winter. About 1 pound is required for 2,500 gladiolus bulbs.

Lb. 25 cts., 3 lbs. 65 cts., 10 lbs. \$1.95.

ALL Legumes Should Be INOCULATED with

FARMOGERM

Get bigger crops and richer soil with Farmogerm. FARMOGERM bacteria are from selected strains. Taken from plants grown in jelly. They come to you in a jelly medium, packed in the bottle with the ventilated stopper. They draw the nitrogen from the air which all bacteria must have to live. Inoculate—ALL CLOVERS, SOY BEANS, ALFALFA PEAS, BEANS, VETCHES.

Endorsed by Leading Agricultural Authorities

FARMOGERM Price List	
FOR ALL CLOVERS AND ALFALFA (Small Seeds)	FOR ALL VETCHES PEAS AND BEANS, SOY BEANS AND COW PEAS. (Large Seeds)
½ BU. 45¢	1 BU. 45¢
1 BU. 75¢	2 BU. 75¢
2½ BU. 1.50	5 BU. 1.50

Garden Size. For Garden Peas, Beans, and Sweet Peas, 25 cts.

Note. Important. When ordering Farmogerm don't fail to state the kind of legumes to be inoculated.

Prevent Brown-Patch with Du Bay Fungicides

Regular applications of Special Semesan, Semesan, or Nu-Green prevent or control the development of brown-patch and assist normal, healthy turf-growth. Special Semesan, giving tremendous coverage (6,000 square feet per pound), greatly reduces the cost of treatment. Semesan is recommended where soil-fertility is high; Nu-green where fertility is lower. Free Turf Disease Pamphlet gives full details.

Special Semesan: 5 lbs. \$7, 25 lbs. \$33, 100 lbs. \$129.

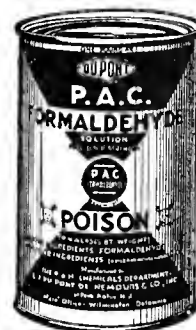
Nu-Green: 3 ozs. 35 cts., lb. \$1.45, 5 lbs. \$6.30, 25 lbs. \$29, 100 lbs. \$115.

Disease control—better stands—sturdier plants with

Semesan

Don't trust to luck for success with vegetables and flowers. Do what you can to *control* conditions. Treat your seeds, corms, bulbs, and seedlings with Semesan. Used as a dust or in solution with water, Semesan reduces seed rotting and damping-off, is highly effective against many seed-borne diseases, even prevents contamination of the soil by certain seed-borne diseases. One ounce treats 15 to 30 pounds of seeds.

2 ozs. 35 cts., lb. \$2.25, 5 lbs. \$9.90, 25 lbs. \$45.50.



Formaldehyde

For wheat and barley smut, use one pint of Formaldehyde in 40 gallons of water. Sprinkle or dip seed in tubs; cover several hours; sow damp. Oats may be treated by the dip or sprinkle method as well as by spraying. For the spray method, use a solution of 1 pint Formaldehyde to 1 pint of water. This solution is sufficient for 50 bushels of seed.

For Potato Scab and Rhizoctonia

Soak potatoes 3 or 4 minutes in warm solution (124° to 126° Fahr.) of 1 pint Formaldehyde in 15 gallons water.

Treat soil with Formaldehyde to overcome root-rot of most vegetables. Will prevent onion smut, lettuce rosette and rot, tobacco bed-rot, and damping-off fungi.

Lb. can 35 cts., 10 1-lb. cans \$3, case (50 1-lb. cans) \$13, 60-lb. keg \$9.50.

Ask for booklet and full directions.

Form-O-Fume Formaldehyde Dust

Form-O-Fume is an especially prepared formaldehyde dust for the prevention of "damping off" of vegetable and flower seedlings and cuttings. It is easily applied, quick in action, certain in results, and very economical.

1-lb. can 50 cts., 5-lb. can \$1.75, 25-lb. drum \$5, 50-lb. drum \$7.50, 100-lb. drum \$13.

To Control Cutworms, Earthworms, Grubs, Sowbugs, Borers, Etc.

Paradow

Unadulterated Paradichlorobenzene For Peach-Tree Borers

Paradow is recommended for the control of peach-tree borers. When placed around the base of a peach tree, it will generate a gas that will kill the borers in that tree. Should be used in spring or fall when trees are not growing vigorously. Use about 1 ounce per tree. Directions on container.

1-lb. pkg. 50 cts., 5-lb. pkg. \$1.75, 25 lbs. \$6, 50 lbs. \$10.

Vermol Worm Eradicator

Effective in promptly bringing earthworms to the surface and killing them. Apply at the rate of one pound to 18 square feet and water in thoroughly.

25 lbs. \$2 00	100 lbs. \$6 00
50 lbs. 3 50	500 lbs. 27 50

Mowrah Meal

For eradication of earthworms in lawns and greenhouses. One pound to 20 sq. ft.

25 lbs. \$1 75	100 lbs. \$4 50
50 lbs. 2 75	500 lbs. 20 00

Snarol

Cutworms, sowbugs, grasshoppers, slugs, snails, earwigs, etc., are quickly exterminated.

Snarol is a ready-prepared meal that you simply broadcast on the ground, under the vegetation. Pests eat it at night and are quickly destroyed.

Snarol will not deteriorate from rain or sprinkling, and is non-injurious to vegetation when used according to simple directions.

1½-lb. pkg. 35 cts., 4-lb. pkg. 85 cts., 15-lb. bag \$3, 50-lb. bag \$8.

Miscellaneous

Kayso

Spray Spreader and Adhesive

Kayso is the combined casein spreader and adhesive used by progressive fruit- and vegetable-growers and florists throughout the United States.

Because of increased spreading and wetting properties, a tank of spray containing Kayso will cover more trees than a spray without it. Kayso raises the market value of your fruit by reducing spray-burn and by producing finer finished and more evenly colored fruit.

2 lbs. 55 cts., case of 24 2-lb. pkgs. \$9.60, 100 lbs. \$18.

C. P. O.

The Spreader That Kills

Use C. P. O. with the following contact sprays to make them more effective: Black-Leaf 40, Lethane, Loro, Selocide, Red Arrow, Ever Green, and many others.

C. P. O. may be used on outdoor nursery plants and in greenhouses for control of Juniper scale, pine-leaf scale, euonymus scale, oyster-shell scale, red spider, mealy bug, spruce gall aphid, rhododendron lace bug, azalea lace bug, aphides, and most sucking insects.

C. P. O. is odorless, safe to use, and will not injure nor discolor foliage.

C. P. O. Liquid

1-pt. can. \$0 60	5-gal. drum. \$8 50
1-qt. can. 1 00	10-gal. drum. 12 50
1-gal. can. 2 50	30-gal. drum. 33 00

C. P. O. Solid

6-lb. can. \$1 75	50-lb. keg. \$9 50
25-lb. can. 5 50	100-lb. keg. 15 50

Whale-Oil Soap

Effective in destroying many sucking insects and lice on plants, trees, ferns, etc. It is an excellent wash to use on rose bushes, porch flowers, vines, rubber plants and palms. Also used as a spreader and adhesive where required.

½-pt. can 35 cts., 1-pt. can 65 cts., 1-qt. can \$1, 1-gal. can \$3, 5-gal. can \$12.

SPRAY CATALIZER. A spreader and sticker. See page 66.

Tree Tanglefoot

A sticky material for banding trunks of trees, vineyards, etc., to protect them against the ravages of climbing insect pests.



No mixing is required. It comes ready for use and is easily and quickly applied with a wooden paddle. One pound makes 15 to 20 lineal feet of band.

6 ozs. 35 cts., lb.
70 cts., 5 lbs. \$3.30,
10 lbs. \$6.25, 25 lbs. \$13.

Tobacco Dust

A specially ground Tobacco Dust, guaranteed to contain not less than ½ of 1 per cent nicotine. It is particularly useful in vegetable- and flower-gardens, in greenhouses and orchards, wherever a dusting powder is desired to destroy plant-lice. Owing to its extreme fineness it readily floats in the air, enveloping the entire shrub or tree in a dense cloud.

2-lb. carton 25 cts., 10-lb. pkg. 75 cts., 100-lb. sack \$3.25, 500 lbs. \$15.

Tobacco Stems

Bale (about 200 lbs.) \$2.50, 3 bales \$7.

Stanley's Crow Repellent Protects Your Corn

During the period when it is most easily damaged, by ridding your crop of crows and other corn-pulling birds, and animal pests, such as moles, gophers, woodchucks, squirrels, etc.

It positively will not clog any planter. It protects seed from rotting in the ground. It will not kill birds or animals, but *will* keep them away.

1-qt. can, enough for 4 bus. seed, \$1.75,
1-pt. can, enough for 2 bus. seed, \$1,
½-pt. can, enough for 1 bus. seed, 60 cts.

Willson Dustite Respirator

Protects your nose, mouth, throat and lungs when spraying, dusting, threshing, etc. \$2.25.

Dogzoff

If you are bothered with dogs, cats, or rabbits, "Dogzoff" is the spray you need. It is a most efficient animal repellent and one spraying will last from three to four weeks. Not poisonous to plants and will not injure animals. Not offensive to humans. Applied with any small insect sprayer. Bottle 60 cts., postpaid.

Bartlett Tree Paint

A tree-wound dressing in liquid form, of asphalt base and other ingredients necessary to protect the tree after pruning. Used by orchardists, tree experts, and state foresters. To thin, use pure linseed oil. Applied with a brush.

Pt. 60 cts., qt. \$1, gal. \$2, 5 gals. \$6.50, 30 gals. \$33.

Trowbridge's Grafting Wax

This brand of Grafting Wax is the oldest brand on the market, and is of the most even consistency and elasticity of any. It is used by softening in warm water, or by the warmth of the hand. It can then be drawn out as thin as paper and spread on the cut and around the graft.

½-lb. pkg. 30 cts., 1-lb. pkg. 50 cts., dozen 1-lb. pkgs. \$5.40.

Hormodin A

The Root-forming Chemical

Hormodin hastens the rooting of cuttings to much less than normal time, assuring quicker and better rootings in higher percentages than ever before possible. Can be used with success on most varieties of plants. The treatment is simple and economical. Complete directions in every package. Ask for booklet.

5-cc. pkg. \$1 00	120-cc. pkg. \$13 00
15-cc. pkg. 2 00	240-cc. pkg. 24 00
60-cc. pkg. 7 00	

Auxilin

Auxilin grows roots on cuttings easily and quickly and develops larger and healthier roots. No special skill or equipment needed. Complete with graduated phial and full directions. Ask for circular.

¼-oz. pkg. \$0 50	3½-oz. pkg. \$6 00
½-oz. pkg. 1 00	8-oz. pkg. 12 00

DELIVERY: At prices given in this catalogue, Insecticides and Fungicides are delivered prepaid on orders amounting to \$2 or more. On orders less than \$2, include postage at rates given on page 1 under Parcel Post Shipments.

RED ARROW GARDEN SPRAY

KILLS BOTH SUCKING AND CHEWING INSECTS

LEAVES NO POISON RESIDUE

Save work by killing insects with Red Arrow Garden Spray. No need to spend time and money for two sprays, one for sucking and one for chewing insects—Red Arrow effectively controls both and leaves no poison residue. Red Arrow is a very highly concentrated pyrethrum spray.

Oz.....\$0 35
4 ozs..... 1 00

Nothing need be added—simply mix with water and spray. One ounce makes 4 to 8 gallons of spray. Will not injure plants, nor affect fertility of the soil. Harmless to animals and humans.

Pt.....\$2 70
Qt..... 3 20
Gal..... 9 70

BLACK ARROW 5000

Combination of very finely ground pyrethrum with other insecticidal factors. Controls insects attacking greenhouse and vegetable crops. Non-poisonous.

Lb.....\$0 50 | 25 lbs.....\$6 50
10 lbs..... 3 25 | 50 lbs.....12 00

McCORMICK'S ROTENONE DUST

Kills bean beetles and other resistant crop pests. Use as a dust or spray. Leaves no poisonous residue. Used by commercial growers and home-gardeners.

Lb.....\$0 30 | 25 lbs.....\$5 50
2 lbs..... 55 | 50 lbs.....10 50
5 lbs..... 1 15 | 100 lbs.....19 00



To Grow More Beautiful Flowers USE EVER GREEN SPRAY

Take a tip from florists. Protect your precious flowers with Ever Green, the powerful yet non-poisonous spray that kills so many types of both chewing and sucking insects. Cannot harm plants, pets, or people when used as directed. A little goes a long way. Just add water and spray.

1-oz. bottle.\$0 35
6-oz. can... 1 00
16-oz. can... 2 00
1-gal. can...11 00

GROWERS! Save Money With MULTICIDE

This new, extra-powerful non-poisonous insecticide kills more insects...made especially for commercial growers, it makes one spraying do the work of several. Gal. \$9.50, 5 gal. \$42.50.

NO FUSS

WITH THIS SPRAY

A Complete Spray

Nicotine Pyrox

TRADE MARK REGISTERED

Nicotine Pyrox protects plants against insect pests, blight, and other fungus diseases. Because it contains all the necessary ingredients properly and scientifically blended, Nicotine Pyrox is a complete garden spray. It contains nicotine to combat sucking insects, arsenic poison to control leaf-eating insects, as well as a copper ingredient which provides protection against fungus diseases.

Nicotine Pyrox comes in a mixed paste form, ready to use. Just dilute with water, and spray. It sticks to the

foliage and does not easily wash off, providing a lasting protection. The paste form of spray material is recognized by authorities as the most efficient form of spray material because it permits the finest mist-like spray which settles like fog over the plant, completely covering the surface of the foliage. Such a fine mist-like spray as Pyrox provides is possible only because Pyrox is a chemical precipitate which makes the minute Pyrox particles many times finer than any dry, powdered material can be ground.

17.6-oz. jar (makes about 3½ gals. spray) 50 cts., 5-lb. drum \$1.75, 10-lb. drum \$3

SCALECIDE

—THE COMPLETE DORMANT SPRAY—

For a complete dormant spray, any tree, shrub, or vine which drops its foliage in winter may be sprayed with Scalecide, just before the buds start in the spring. Use Scalecide 1 to 15 on apples, pears, peaches, maples, dogwood, elms, lilac, rose bushes, etc. This spray is for San Jose scale, oyster-shell scale, scurfy scale, red mite, woolly aphis, green aphis, etc., as well as building up the general vigor and vitality of the trees.

For conifers, spruces, pines, etc., spray with Scalecide 1 to 20, just before the new growth starts in the spring.

For evergreens, euonymus, etc., spray at the same time with a dilution of 1 to 25.

Para-Scalecide Method

For control of peach borers stir in 1 pound of Paradow (paradichlorobenzene) to 1 gallon of Scalecide. Dilute this combination with 7 gallons of water and spray ground around base of tree and trunk 8 inches above the ground, using approximately 1½ pints per tree. Mound after application. Ask for booklet.

PRICES

1-qt. can.....	\$0 65
1-gal. can.....	1 55
5-gal. can.....	5 75
15-gal. drum \$11.25. Returnable drum extra \$2.....	13 25
30-gal. drum \$18.50. Returnable drum extra \$2.50.....	21 00
50-gal. drum \$26. Returnable drum extra \$3.....	29 00



Deposit on drum refunded when returned to B. G. Pratt Co., Hackensack, N. J., prepaid. Price on 5 drums and upwards quoted on request. ASK FOR SCALECIDE BOOKLET.

SULFOCIDE

A Better Summer Spray

A concentrated liquid sulfur fungicide in soluble form. When sprayed, decomposes into sulfur in its finest colloidal form on the fruit and foliage. For apple scab, brown rot of peaches, plums, and cherries; for blight and rot on potatoes, tomatoes, and melons. One of the finest bean sprays known. Used for mildew and rust on flowers and shrubs. Dilutes 1 gallon to 200 gallons of water. For brown rot at picking-time on peaches and cherries use ½ gallon Sulfoicide and 1½ pounds of soap to 100 gallons of water.

Fungous diseases can be prevented, but they can seldom be cured. Therefore early spraying is very important, and additional sprays should be put on at frequent intervals to protect the new growth.

PRICES

1-pt. can.....	\$0 50
1-qt. can.....	85
1-gal. can.....	2 25
5-gal. can.....	7 50
10-gal. can.....	13 50
30-gal. drum.....	33 00
50-gal. drum.....	50 00

Drums not returnable



D-X Pyrethrum Spray

Contains 99 per cent active ingredients



New Penetrating
PYRETHRUM SPRAY

A powerful, non-poisonous contact spray for chewing and sucking insects. Kills and repels aphids, Japanese beetles, Mexican bean beetles, tent caterpillars, canker worms, thrips, sod webworms, cabbage worms, leaf hopper, and many similar insects.

D-X is the latest scientific word in contact sprays. It is the result of the combined efforts of a group of leading entomologists.

D-X will not stain or injure the tenderest foliage. Combines with lime-sulfur, bordeaux, arsenate of lead and standard insecticides. Dilutes 1 to 800 for aphids—stronger for more resistant insects.

Special Directions for Japanese Beetle Control

Spray with ½ gallon D-X and 2 pounds Arsenate of Lead to 100 gallons water. In small quantities this is equivalent to 6 teaspoonfuls of D-X and 2 rounded teaspoonfuls of Arsenate of Lead to 1 gallon water.

PRICES

1½-oz. bottle.....	\$0 35
½-pt. can.....	1 00
1-pt. can.....	1 75
1-qt. can.....	2 75
1-gal. can.....	7 50
5-gal. can.....	30 00



SPRAY CATALIZER

A spreader, sticker, and safener for sulfur sprays. Particularly effective for use with lead arsenate, lime-sulfur, or lead arsenate Sulfoicide spray mixtures. Not only does it control the normal breakdown of polysulphides, but it effectively blocks the usual reaction which occurs between lead arsenate and lime-sulfur or lead arsenate and Sulfoicide solutions when the two are combined. Combinations to which Spray Catalizer has been added do not blacken, even after hours of standing. There is no immediate black sulphide formation. Takes the place of calcium caseinate, skimmed milk, and other commonly used spreaders and stickers.

Always use Spray Catalizer whenever using lime-sulfur or Sulfoicide.

PRICES

2-lb. bag.....	\$0 55
Case (24 2-lb. bags).....	9 60
50-lb. bag.....	9 00



Lawn and Garden Tools

Stakes



Wooden, Round, Tapering, painted green.
Light Stakes are made from western white pine and the heavy from cypress.

	Doz.	100
1½ ft. long, light weight....	\$0 35	\$1 75
2 ft. long, light weight.....	50	3 25
3 ft. long, light weight.....	1 00	6 00
4 ft. long, light weight.....	1 40	8 75
3 ft. long, heavy weight....	1 50	9 75
4 ft. long, heavy weight....	1 85	12 75
5 ft. long, heavy weight....	2 50	16 25
6 ft. long, heavy weight....	3 00	20 00

Hyacinth. 12 in. long.....\$0 35 \$2 00
18 in. long.....45 2 50

Japanese Bamboo Canes. Dyed green. Uniform pencil thickness throughout. Just the thing for pot-plants and plants that need just a light support.

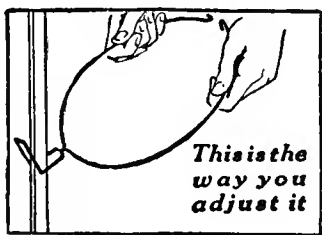
	Doz.	50	100	1,000
2 ft. long...	\$0 10	\$0 25	\$0 40	\$2 75
3 ft. long...	15	35	60	4 25
4 ft. long...	20	50	90	6 75

Heavy Bamboo Tonkin Stakes. Make excellent supports for dahlias and plants of this type.

	Diam.	Doz.	50	100
4 ft.	½ to ⅝ in.....	\$0 60	\$2 00	\$3 00
5 ft.	⅝ to ¾ in.....	75	2 75	4 50
6 ft.	¾ to ⅞ in.....	85	3 00	5 00
8 ft.	¾ to ¾ in.....	1 00	3 50	6 00

Adjusto Plant Supports

A sturdy, hard-wood stake seven-eighths inch square, with a strong wire support instantly adjustable to any height. A suitable support for tomatoes, dahlias, peonies, and all similar plants.



Each		Doz.		Each		Doz.	
3 ft....	\$0 25	\$2 10	5 ft....	\$0 30	\$2 70		
4 ft....	28	2 40	6 ft....	35	3 00		

Dennis Plant Stakes

A substantial support for dahlias and all similar plants. Made of clear pine, ¾ inch square, with rattan reed to fasten or hold plant.

plant.	Each	Doz.	10 doz.
No. 441. 3 ft.....	\$0 10	\$1 00	\$9 00
No. 442. 4 ft.....	15	1 25	11 00
No. 443. 5 ft.....	20	1 50	13 50

Garden or Pot Labels (Painted)

	100	500	1,000
4 in. x $\frac{5}{8}$ in. wide....	\$0 40	\$1 50	\$2 50
5 in. x $\frac{5}{8}$ in. wide....	45	1 65	2 75
6 in. x $\frac{5}{8}$ in. wide....	50	1 75	3 00
8 in. x $\frac{7}{8}$ in. wide....	1 00	3 75	6 25
10 in. x $\frac{7}{8}$ in. wide....	1 15	4 50	7 50
12 in. x 1 $\frac{1}{8}$ in. wide...	1 60	6 50	11 00
3 $\frac{1}{2}$ in., copper-wired.	60	2 00	3 25

Simplex Green Weatherproof Plant Labels

For permanent identification of roses, dahlias, and other plants in garden and rockery. Copper-wired.

Copper-wired.	Doz.	100
No. 31. 3 x ½ in.....	\$0 40	\$2 50
No. 32. 4 x ¾ in.....	60	4 00
No. 33. 5 x 1 in.....	85	5 50
Steel Stylus only, 10 cts. each.		

Earthen Flower Pots



Standard Pots			
Insidediam.	Each	Doz.	
2 ½ in...	\$0 04	\$0	30
4 in.....	07		60
5 in.....	10	1	00
6 in.....	15	1	50
7 in.....	25	2	50
8 in...	35	3	25
9 in.....	50	5	00
10 in.....	70	7	00
12 in.....	1 30	14	00

Flower-Pot Saucers

Inside diam.	Each	Doz.	Inside diam.	Each	Doz.
4 in....	\$0 05	\$0 45	8 in....	\$0 20	\$1 85
5 in....	07	65	9 in....	25	2 25
6 in....	10	90	10 in....	35	3 25
7 in....	15	1 35	12 in....	50	5 00

Azalea Pots

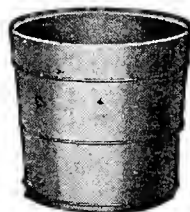
Inside diam.	Each	Doz.	100
6 in. x 4 ³ / ₄ in. deep....	\$0 15	\$1 50	\$10 50
7 in. x 5 ¹ / ₄ in. deep....	25	2 50	17 50
8 in. x 5 ³ / ₄ in. deep....	35	3 25	23 00
9 in. x 6 ¹ / ₄ in. deep....	50	5 50	39 00
10 in. x 6 ³ / ₄ in. deep....	65	7 00	48 00

Low Pans

Inside diam.	Each	Doz.	100
5 in. x 3 1/4 in. deep.....	\$0 10	\$1 00	\$7 00
6 in. x 3 1/2 in. deep.....	15	1 50	10 50
7 in. x 3 3/4 in. deep.....	25	2 50	17 50
8 in. x 4 in. deep.....	35	3 25	23 00

Cedar Plant Tubs

Made of seasoned, selected Virginia white cedar, bound with electric welded wire hoops, and painted with the best oil paints—a handsome green color inside and out. Regularly furnished with no handles.



Size	Inside top diam.	Inside bot. diam.	Inside depth	Each
No. 1.	6 in.	5 in.	6 in....	\$0 50
No. 3.	8 in.	6 in.	8 in....	75
No. 5.	10 in.	7½ in.	9 in....	95
No. 7.	12 in.	9 in.	11 in....	1 40
No. 9.	14 in.	11 in.	13 in....	2 00
No. 11.	16 in.	12½ in.	15 in....	2 50
No. 13.	18 in.	14½ in.	17 in....	3 25

If stamped steel handles are desired, add 25 cents per tub, extra.

Fibre Flower-Pot Saucers

Will not scratch or mar woodwork.

	Outside diam.	Each
No. 6330.	11¾ in. fits 10¼-in. pot....	\$1 00
No. 6337.	14¼ in. fits 12½-in. pot....	1 50
No. 6341.	16 in. fits 14½-in. pot.....	1 75
No. 6345.	17½ in. fits 16-in. pot.....	2 00

Rolling Stands

A strong and compact support for plants in pots and tubs.

	Each
No. 12. Fits No. 6330 Saucer.....	\$2 25
No. 14. Fits No. 6337 Saucer.....	2 50
No. 16. Fits No. 6341 Saucer.....	3 00
No. 18. Fits No. 6345 Saucer.....	3 25

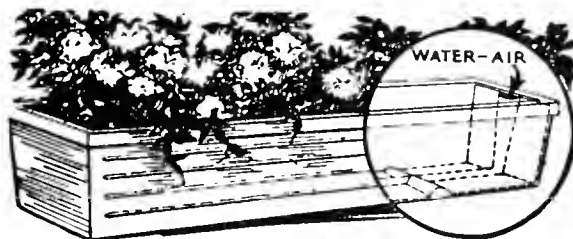
Raffia

For tying, bunching, basket-making, and fancy work.

Natural. In plaits. Lb. 35 cts., postpaid 45 cts.; 10 lbs. \$3, postpaid \$3.25.

Green. Bundle (about 1 lb.) 95 cts.

Natural Green Moss. In sheets. Bag, about 2 bushels. \$1.50.

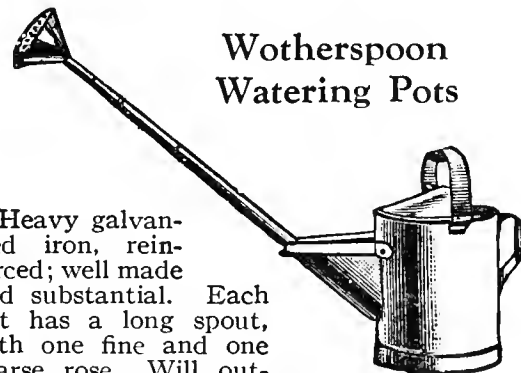


The Perfecto Flower-Box

Proper Irrigation : Proper Ventilation

Provides correct, approved, scientific principles for raising luxuriant plants and flowers indoors or outside. Patented system with water entrance at both ends feeds water properly at roots of plants and circulates air beneath soil; keeps it from souring. Finished in green enamel.

	Each
14 in. long, 6 in. deep, 7 in. wide....	\$1 00
20 in. long, 6 in. deep, 7 in. wide....	1 15
26 in. long, 6 in. deep, 7 in. wide....	1 40
32 in. long, 6 in. deep, 7 in. wide....	1 60
38 in. long, 6 in. deep, 7 in. wide....	2 50
44 in. long, 6 in. deep, 7 in. wide....	3 00



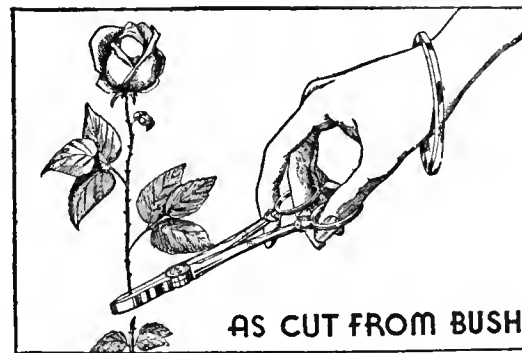
Wotherspoon Watering Pots

Heavy galvanized iron, reinforced; well made and substantial. Each pot has a long spout, with one fine and one coarse rose. Will outlast two or three ordinary pots.

Round Pattern.	Each
8-qt.....	\$5 65
10-qt.....	6 00
12-qt.....	6 35

Lisk Galvanized Watering Pots

	Each
4-qt.....\$0 85	
6-qt.....95	
8-qt.....1 10	
10-qt.....1 20	
12-qt.....1 40	
14-qt.....1 75	



Garden Club Flower Shears

Made of quality steel. Will not rust. \$1.25.

Eversharp Flower Shears

Just the Shears for cutting and gathering flowers. Snips and holds in one operation. No. 750. 75 cts.



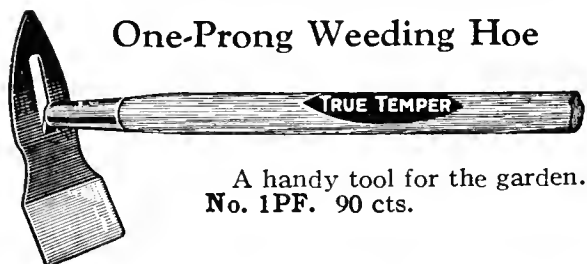
Garden and Field Hoes

No. G. 4½-ft. handle, steel socket, best quality. 6 and 6½-in. blade, \$1.30 each; 7 and 7½-in. blade, \$1.35 each.
No. PG. 6 or 7-in. blade, 4-ft. handle, steel socket, light weight. 90 cts.
No. LY5 Ladies' Hoe. 5-in. blade. \$1.



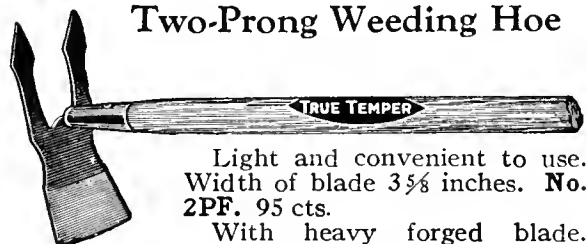
One-Piece Steel Mattock

Just the tool for heavy soil. Has two oil-tempered blades. Strong and light. 4½-ft. ash handle.
No. DE3H. \$1.55.
No. DE3. Two-piece. \$1.35.



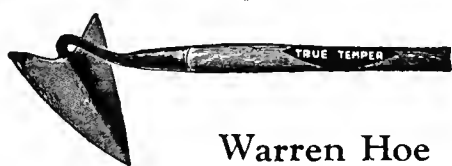
One-Prong Weeding Hoe

A handy tool for the garden.
No. 1PF. 90 cts.



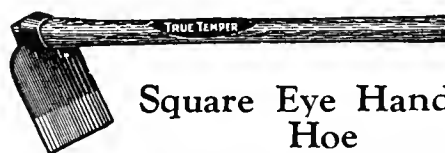
Two-Prong Weeding Hoe

Light and convenient to use. Width of blade 3⅝ inches. No. 2PF. 95 cts.
With heavy forged blade. No. 2PH. \$1.15.



Warren Hoe

No. W. 7½-in. blade, 4½-ft. handle. \$1.60.
Baby Warren Hoes No. BW. 4½-in. tempered steel blade, 6½-in. handle. 80 cts.



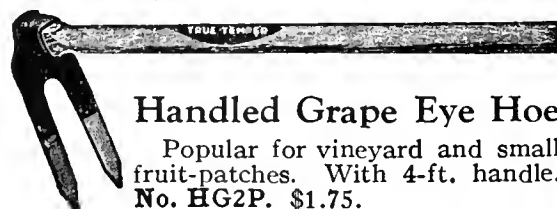
Square Eye Handled Hoe

Forged and drawn from one solid piece of steel. 4½-ft. handle. No. GE6-O. With 4½-in. blade, 95 cts. No. GE3-O. With 6-in. blade, \$1.10.



Italian Grape Hoe

Blade and eye forged from one solid piece of steel. Blade, 7 in. wide X 9 in. deep, 3½-ft. ash handle. A heavy tool for heavy work.
No. IGH7. \$2.30.

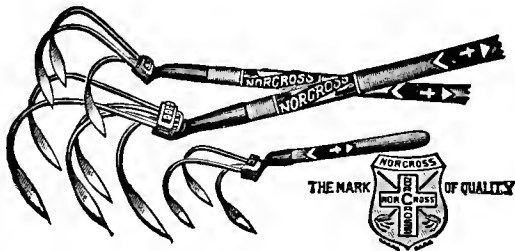


Handled Grape Eye Hoe

Popular for vineyard and small fruit-patches. With 4-ft. handle.
No. HG2P. \$1.75.

Potato Hook

Four diamond-back tines; goose neck. 4½-ft. handle. No. 4GND. \$1.50.



Norcross Hand Garden Cultivator

5-prong, 4-ft. handle. \$1 25
3-prong, 4-ft. handle. 1 00
Midget, 9-in. handle. 60
Midget by parcel post, 10 cts. extra; 3-prong and 5-prong, 15 cts. extra.



Speedy Cultivator

A very useful tool for work around flower-beds, shrubs, and roses. No. SC4. With 4 tines. \$1.15. No. FW3. With 3 tines. \$1.

Spades

Garden. D-handle, blade 7½ x 12 in. \$1 75
Garden. Long handle, blade 7½ x 12 in. 1 75
Drain. D-handle, blade 5½ x 16 in. 1 90
Nursery. For heavy work. Blade 5¼ x 12¾ in. 4 10

Forks



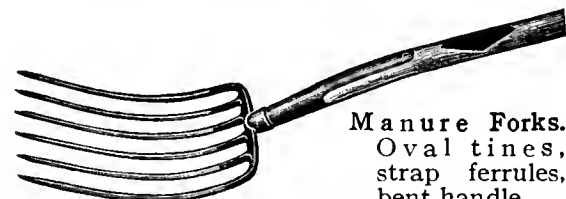
Spading Forks

No. OHW. Flat tines 11 in. long, wood D-handle. \$2 20
No. OHD. Flat tines 11 in. long, steel D-handle. 1 90
No. B4D. Flat tines 8½ in. long, Boy's steel D-handle. 1 00
No. POLD. Flat tines 11 in. long, steel D-handle. 95
No. ED4. English Digging. Square tines 11½ in. long. Wood D-handle. 3 30



Hay Forks. Oval tines, strap ferrules.

No. 034B. 4-ft. handle. \$1 60
No. 034½B. 4½-ft. handle. 1 65
No. 035B. 5-ft. handle. 1 75
No. 035½B. 5½-ft. handle. 1 90
No. 036B. 6-ft. handle. 2 10



Manure Forks. Oval tines, strap ferrules, bent handle.

No. 044. 4-tine, 4-ft. bent handle. \$1 85
No. 04D. 4-tine, iron D-handle. 1 85
No. 064. 6-tine, 4-ft. handle. 2 25
No. 06D. 6-tine, iron D-handle. 2 25



Ensilage or Barn Forks. Half polished oval tines. Steel D-handle.

No. 506. 6 15½-in. tines. \$2 95
No. 508. 8 16-in. tines. 3 10
No. 510. 10 16-in. tines. 3 65

Garden Trowels



No. DST. Forged from one solid piece of steel and tempered. \$1.
No. 211. Forged steel. 5-in. 80 cts., 6-in. 85 cts., 7-in. 90 cts.
No. 215. English Pattern. 6-in. 25 cts.

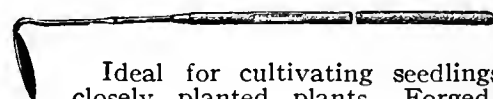


No. 217

No. 217. Transplanting. 6-in. 25 cts., 7-in. 30 cts., 8-in. 35 cts.

The Handy Hoe

LENGTH OVERALL — 4 FEET

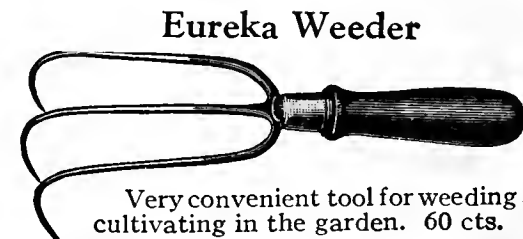


Ideal for cultivating seedlings and closely planted plants. Forged steel blade ¾ in. wide and 4 in. long; length over-all, 4 ft. 65 cts.



Gem Garden Spade

A handy tool where careful cultivation is required. 60 cts.



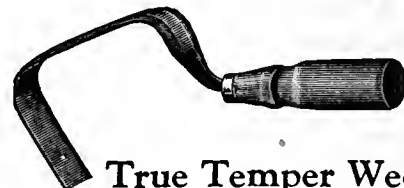
Eureka Weeder

Very convenient tool for weeding and cultivating in the garden. 60 cts.

Triangular Steel Weeder



Used extensively for close garden-work among young, tender plants. No. 3W. 3-in. blade, 8-in. handle, 60 cts. No. 34W. 3-in. blade, 4-ft. handle, 90 cts.



True Temper Weeder

Made from special high-grade steel.
No. BW1. 70 cts.

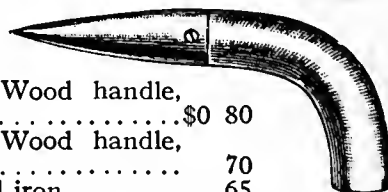
Hazeltine Weeder. Same style as True Temper Weeder except lighter material.
No. 200. 40 cts.



Asparagus Cutter

No. 2500. Used also as a weeder and dandelion digger. 40 cts.

Dibbles



No. 218. Wood handle, usual size. \$0 80
No. 219. Wood handle, small size. 70
No. 220. All iron. 65
No. 226. Aluminum. 1 00



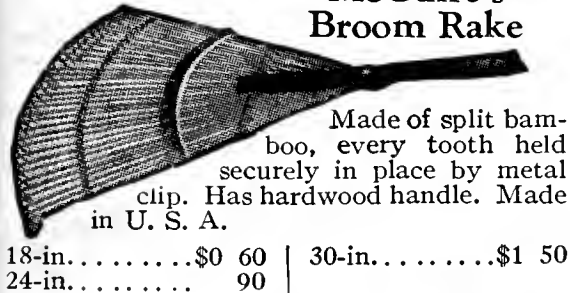
Steel Garden Rake

Forged from one solid piece of steel; straight teeth; hammer-drawn, single shanks.

10 teeth.....\$1 15	16 teeth.....\$1 40
12 teeth.....1 25	18 teeth.....1 60
14 teeth.....1 30	

14-tooth Panther Steel Garden Rake.. 80

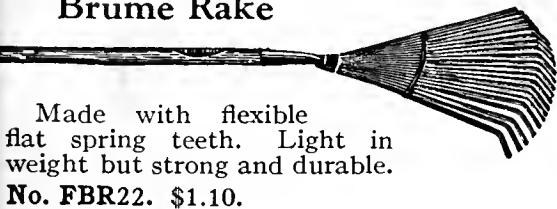
McGuire's Broom Rake



Made of split bamboo, every tooth held securely in place by metal clip. Has hardwood handle. Made in U. S. A.

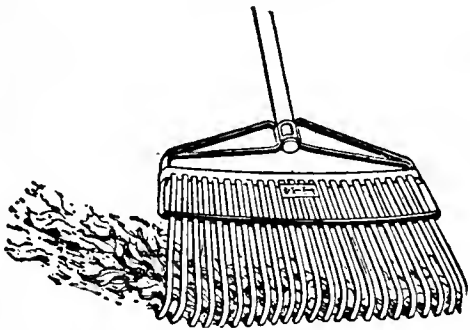
18-in.....\$0 60	30-in.....\$1 50
24-in.....90	

Brume Rake



Made with flexible flat spring teeth. Light in weight but strong and durable. No. FBR22. \$1.10.

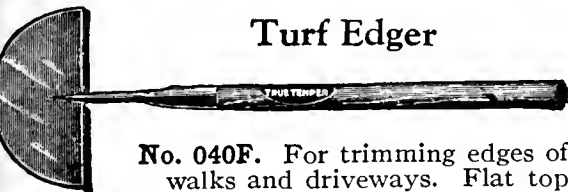
The Lawncomb



This rake has flat steel teeth and a steel frame. It is just what its name implies. Width 18 in.

No. LC18. \$1.35 each.

Turf Edger



No. 040F. For trimming edges of walks and driveways. Flat top blade. 4-ft. handle, \$1.25.

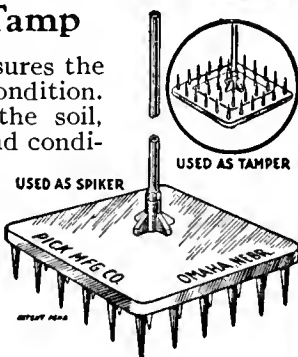
Planet Jr. Grass Edger

Has sharp edge steel disc with 36-inch handle. Edges straight or curved walks quickly and easily.

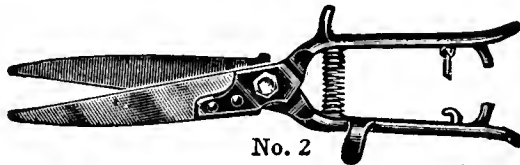
No. 2. \$1.65, postage 20 cts. extra.

Spike Lawn Tamp

Spiking a lawn assures the maintenance of its condition. It admits air into the soil, loosens the root-bound condition of the grass and permits water to enter the soil. Plate 9 in. square, spikes 1 3/4 in. long, weight 11 1/2 lbs. \$4.50.



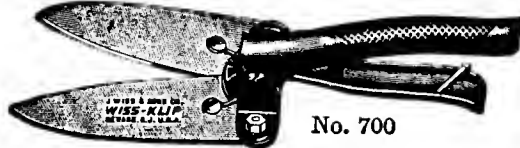
Grass Shears



No. 2

No. 2. Little Giant Grass Shears. 5 1/2-in., full polished, cutlery steel blades. Malleable handles. 75 cts.

No. 600. Wiss Quality Grass Shears. \$1.65.



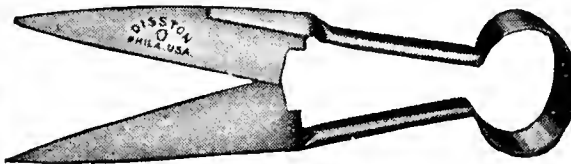
No. 700

No. 700. Wiss Grass Shears. Operates with an easy up-and-down movement. \$1.40.

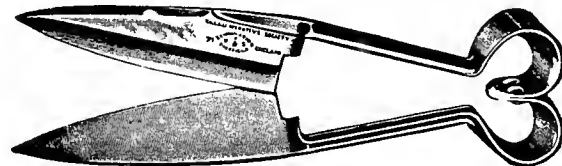
No. 701. With narrow blades for working in close places. \$1.40.

Grass and Sheep Shears

No. 200E. 5 1/2-in. Full polished. 60 cts.

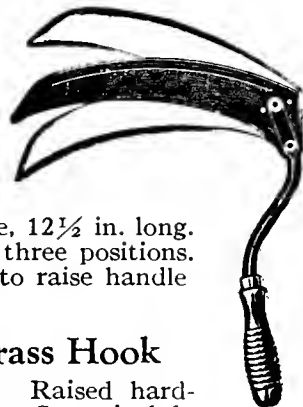


No. 1105. 6 1/2-in. Finest quality cutlery steel; trowel shank. \$1.25.



No. 71. 6 1/2-in. Best quality Sheffield steel English Shears. \$4.50.

Little Giant Adjustable Grass Hook



Cutlery steel blade, 12 1/2 in. long. Blade adjustable to three positions. Steel shank shaped to raise handle 75 cts.

Nowatoco Grass Hook

Solid steel blade. Raised hardwood handle. 55 cts. Same in left-hand style, 65 cts.

English Grass Hook



Blade finest Sheffield steel riveted to heavy back. \$1.

German Blue Blade Grass Hook

Thin blade of high-tempered steel. 65 cts.

Austrian Grass Hook

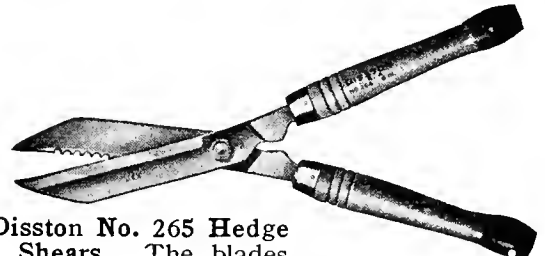
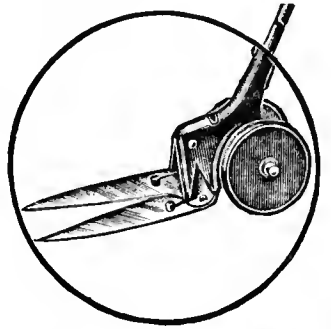
Has 5-inch shank. Used extensively by cemeteries, golf clubs, etc. 85 cts.

Oakland Grass Hook

Solid steel blade, 18-inch handle. 85 cts.

The Doo Klip Long-Handle Grass Shears

Particularly desirable for use under bushes or shrubs, it also works perfectly along walks, foundations, and all difficult places. Operated from a standing or erect position. Handle 33 inches long. \$2.50.

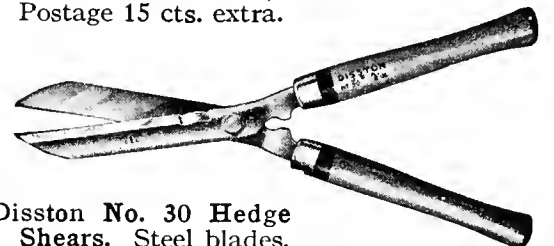


Disston No. 265 Hedge Shears.

The blades are 1 3/4 inches wide, hollow-ground and polished. One blade serrated to prevent slipping. Blade and shank made from one piece of forged steel.

8-in. blade..\$2 35	10-in. blade..\$2 65
9-in. blade..2 50	

Postage 15 cts. extra.



Disston No. 30 Hedge Shears.

Steel blades, half-oval, hollow-ground, full polished, hardened and tempered; hardwood handles tangs extend entire length of handle. Tension device eliminates spring.

6-in. blade..\$2 00	9-in. blade...\$2 85
8-in. blade..2 65	10-in. blade...3 00

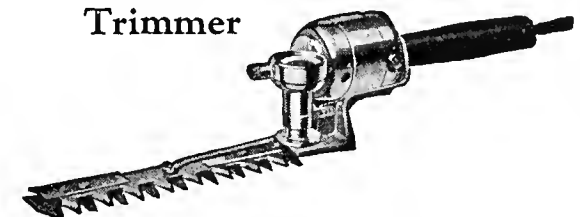
Postage 15 cts. extra.



Quaker City No. 016 Hedge Shears

Hollow ground and polished steel blades. Tang driven into hardwood handle, reinforced by steel ferrule. Very satisfactory Hedge Shears at a moderate price. 8-in. blade, \$1.35. Postage 15 cts. extra.

Dumore Electric Hedge Trimmer



A very satisfactory Electric Hedge Trimmer at a price that anyone can afford. It pays back its cost each season through saving in time and labor. The Dumore is light in weight, well balanced, and adapts itself to any type of hedge-trimming. Specially designed blades provide clean, smooth cutting. High-speed power is supplied by the light but dependable Dumore motor. Length over all, 18 1/2 inches; cutting width, 9 inches. Weight, 3 3/4 pounds. Price \$24.50.



Acme Fertilizer Spreader and Seeder

Spreads uniformly any dry pulverized commercial fertilizer, pulverized lime, ashes, bonemeal or grass seeds. Easy acting spiral agitator. Quick adjustment of the feed, any desired opening or complete shut-off. Runs easily. Works either way, push or pull. Hopper is of galvanized steel. Wood handle and steel wheels.

No. 500. Size 12 x 20 inches, and 10 inches deep. Capacity about 2½ pecks of fertilizer. \$6.50.

No. 505. Size 9½ x 16 inches, and 8 inches deep. Capacity 25 pounds of fertilizer. \$3.25.

Other Fertilizer Spreaders shown on pages 58 and 59

Shovels

- No. FE23.** Fox Round Point. D-handle. \$1 75
No. FL29. Fox Round Point. Long handle. 1 75
No. FE11. Fox Square Point. D-handle 1 75
No. FL17. Fox Square Point. Long handle. 1 75
No. BE72. Star Coal Shovel. D-handle. 1 75
No. CXL0. Ladies' Garden Shovel. Round point; long handle. 1 25



No. AFSD. Automobile Spade. Forged steel blade 5 x 8 in. Length overall, 24 in. 90 cts.

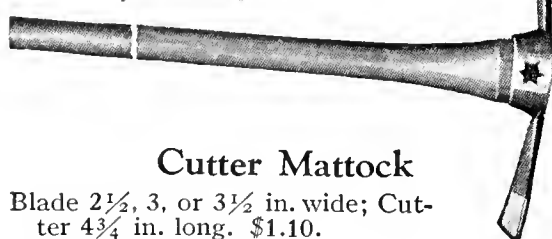
No. FSD. Floral Shovel. Similar to above. Length overall, 38 in. \$1.



Champion Wire Scoop. The lightest and strongest Potato Scoop made. Specially recommended for the handling of corn, potatoes, and vegetables. Blade 13 in. x 16 in. Steel D-handle, wood grip. \$2.50.

Little Digger Garden Mattock

Made of forged steel. Light in weight but sturdily built. Double-blade style, as illustrated, or Blade and Cutter style, each \$1.40.



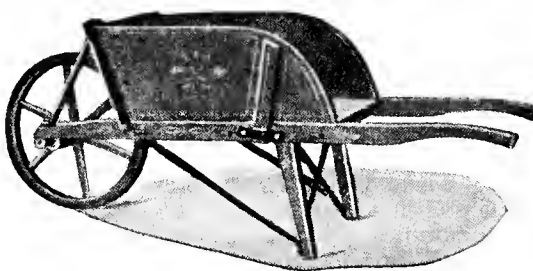
Cutter Mattock

Blade 2½, 3, or 3½ in. wide; Cutter 4¾ in. long. \$1.10.

Blade 3, 3½, or 4 in. wide; Cutter 5¼ in. long. \$1.20.

Railroad Picks. 2 in. wide chisel end, weight 5 lbs., 90 cts. 2 in. wide chisel end, weight 6 lbs., \$1.

Pittsburgh Garden Barrows



These Barrows are made of thoroughly seasoned wood, have double frames, firmly bolted together and iron braced. They are neatly finished and very strong.

No. 1. Large. Body, 30 x 24 in.; sideboards, 12 x 30 in.; wood wheel, 1¾ x 22 in. Weight, 65 lbs. Price \$9.50.

No. 2. Medium. Body, 28 x 20 in.; sideboards, 12 x 27 in.; wood wheel, 1¾ x 20 in. Weight, 50 lbs. Price \$8.

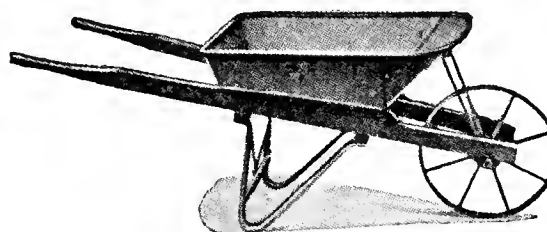
No. 5. A high-grade, well-made Barrow at a low price. Will give good service for a long time. Body, 26 in. long, 19 in. wide front, 23 in. wide rear; sideboards, 12 in. high; handles, 56 in. long. Steel wheel. Weight, 50 lbs. Price \$6.40.

Extra for 3-in. Tire Wheel on No. 1 or No. 2.....\$0 50

Extra for 5-in. Tire Steel Wheel on No. 1 or No. 2.....1 40

Extra for 16 x 4-in. Pneumatic Rubber Tire Wheel on No. 1 or No. 2.....6 50

Steel Tray Barrows



No. 20. Home Barrow. An exceptional Barrow for light work and general use around the home and garden. Tray of one-piece steel. Channel steel legs. Steel wheel 15½ in. diam. Capacity, 2½ cu. ft. Weight, 40 lbs. Price \$4.60.



No. 15A. Adapted to cement or construction work or hauling manure. Designed with round front tray, so that materials will dump and clean easily. Hardwood handles, steel tray, and steel legs. Steel wheel, 15½ in. diam. A substantial Barrow that will stand a lot of hard usage. Weight, 65 lbs. Capacity, 3½ cu. ft. Price \$8.35.

No. 154. Same design as No. 15A. Weight, 70 lbs. Capacity, 4 cu. ft. Price \$8.75.

No. 155. Same design as No. 15A. Weight, 75 lbs. Capacity, 5 cu. ft. Price \$9.65.

Sieves

Constructed from the best steel wire cloth. Wood sides, 3½ inches inside depth, well braced. Can be used for screening soil and also for cleaning grain.

No. 4. ¼-in. mesh; **No. 6.** ⅜-in. mesh; **No. 8.** ½-in. mesh. \$1 each.

Scythes and Snaths



Little Giant Grass Scythe, with Dutch Heel. 30 to 32-in. \$1.85.

True Temper "World's Finest" Grass Scythe. With wide Dutch heel. Briar edge. 28 and 30-in. \$2.

English Riveted Back Scythe. 30 to 34-in. \$3.

German Blue Blade Scythe. Width of blade at heel, 4 in., length 30 in. Thin blade type; fully warranted. \$1.90.

Genuine Austrian Schwanen Sense Scythe. Straw-tempered finish with picture of two swans on blade. \$2.

Genuine Austrian Schwanen Sense Scythe. With American heel. \$2.

Little Giant Grain Scythe. 48-in. \$2.25.



Weed Scythe, Heavy Pattern. 26 to 28-in. \$2.



Bush Scythe, Heavy Pattern. 18 to 22-in. \$2. **Sharpening Outfit for German and Austrian Scythes.** Consists of Hammer (without handle) and Anvil. Weight, 1 lb. \$1.25. Postage 10 cts. extra.

Patent Grass Snath No. 25. With loop bolt and nut. \$1.50.

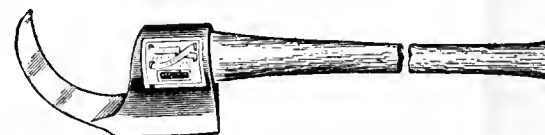
Bush Snath No. 125. With loop bolt and nut. \$1.75.

Straight Snath, S3. For German and Austrian Scythes with ring and wooden wedges. \$1.35.

True Temper Grass Cutter. Double serrated-edge blade. 9 in. long; length overall 38 in. No. 29. \$1.

Nowatoco Scythhook. For cutting light bushes, weeds, and grass. Blade 18 in. long; handle 4½ ft. long. \$1.50. Postage 10 cts. extra.

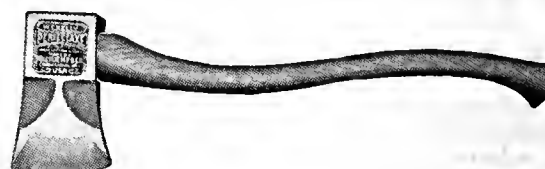
Little Giant Long-Handle Grass Hook. A useful tool for parks, cemeteries, golf grounds, etc. Blade 12½ in. long; handle 3½ ft. long. (Not illustrated.) \$1. Postage 10 cts. extra.



Little Giant Bush Hook. Crucible steel blade, double cutting edge; 30-in. hickory handle. \$2.75.

Blood's Bush Hook. Forged blade, one cutting edge; 36-in. hardwood handle. \$2.

Kelly Axes



Forged, with crucible steel bit welded upon a mild steel body. Scientifically patterned; bursts the chips easily. Does not bind in the wood. 36-in. extra-quality hickory handle.

Single Bit, 3½ or 4-lb. \$2.35; 4½ or 5-lb. \$2.50; 5½-lb. \$2.60.

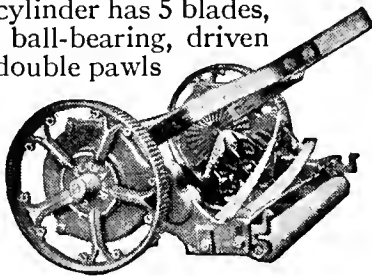
Double Bit, 3½ or 4-lb. \$2.80; 4½ or 5-lb. \$2.90; 5½-lb. \$3.

Pennsylvania Quality Lawn-Mowers

Pennsylvania Junior Lawn-Mower

This is the standard Mower for general trimming, and probably is used on more private estates, parks, cemeteries, and golf-courses than any other Mower. The cylinder has 5 blades, 6 inches in diameter; is self-aligning, ball-bearing, driven by a train of 3 gears on both sides; double pawls to prevent slipping. It will cut the toughest grass and give a smooth finish.

	Weight	Price
15-inch.....	41 lbs.	\$21 75
17-inch.....	43 lbs.	23 75
19-inch.....	45 lbs.	26 75
21-inch.....	48 lbs.	29 75

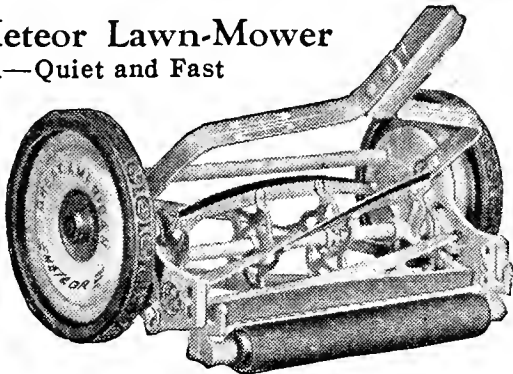


Great American Meteor Lawn-Mower

Built of Aluminum—Quiet and Fast

Brand new and the last word in Lawn-Mowers. Pushes easily and will hold steadily to the ground. Two screws, fitted with spiral springs to hold them securely, adjust the lower blade. All bearings are packed with grease. Equipped with rubber tires and rubber-covered roller. Has five crucible steel blades.

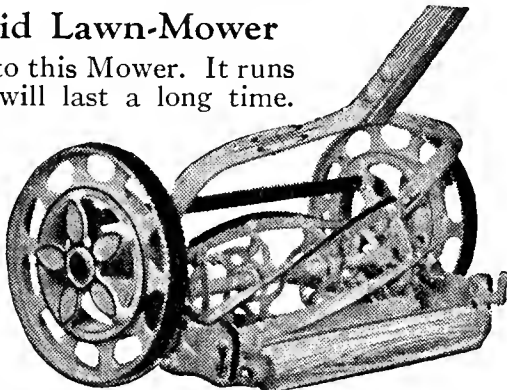
16-inch.....	35 lbs.	\$19 35
19-inch.....	38 lbs.	\$23 35



Pennsylvania Orchid Lawn-Mower

A lot of value is built into this Mower. It runs easily, cuts cleanly, and will last a long time.

The cylinder is extra large for cutting high grass. Has 10-inch wheels and five crucible tool steel blades. Lower blade has a raised cutting edge. The ball-bearings are well protected from dust and dampness and are automatically kept in adjustment by a spring. 15-in. (38 lbs.), \$12; 17-in. (40 lbs.), \$12.75.

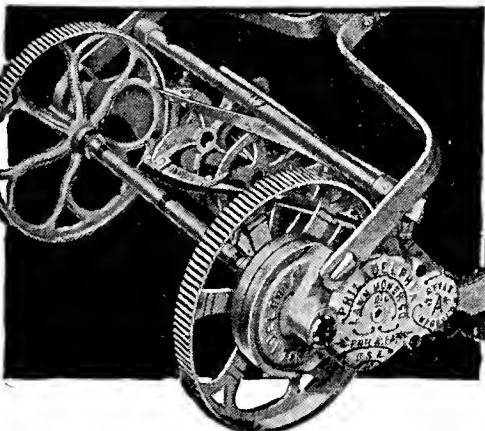


Pennsylvania Orchid Bent Lawn-Mower

This is the Pennsylvania Orchid Mower with 7 blades for cutting creeping bent grasses. 17-in. (43 lbs.), \$18.

Catalogue and Price-List of Pennsylvania Fairway Mowers and Greens Mowers on request

Style "A" "PHILADELPHIA" Lawn-Mower



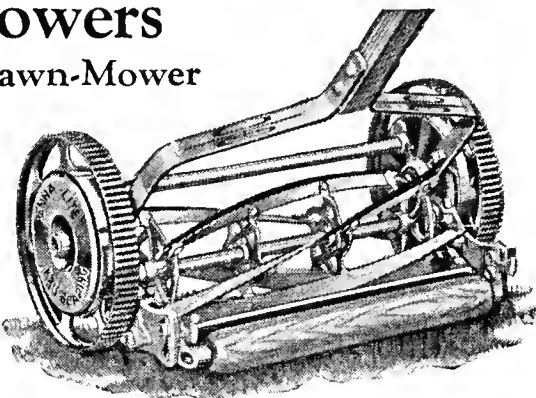
This Mower is especially designed for use on large lawns and meets the most exacting demands. Being all-steel construction it is practically indestructible. It is so constructed that the revolving cutter can be removed for sharpening without disturbing any of the parts. Has four blades, 10-inch wheel, 6 5/8-inch cylinder, train of three gears and double ratchet.

15-inch.....	50 lbs.	\$21 75
17-inch.....	52 lbs.	23 75
19-inch.....	53 lbs.	\$26 75
21-inch.....	54 lbs.	29 75

Penna-Lite Lawn-Mower

Aluminum Alloy Castings

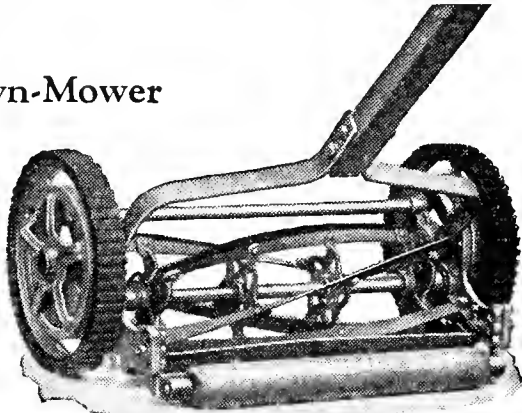
A high-grade feather-weight Lawn-Mower weighing only 31 pounds. Unexcelled for terraces. Runs so easily that a child can handle it. Has 10-inch drive wheels and five crucible tool-steel blades, oil-hardened and tempered, and automatic spring adjustment on ball-bearings. 17-inch cut, \$17.50.



Primos B Lawn-Mower

An honestly built, high-quality Mower, well adapted for the household lawn. Has 10-inch drive wheels with solid rubber tires, five crucible steel blades, and self-adjusting ball-bearings.

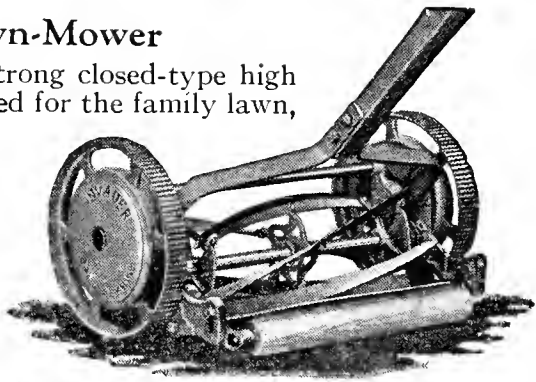
16-inch..	43 lbs.	\$11 45
-----------	---------	---------



Invader Lawn-Mower

This Mower, with its strong closed-type high wheels, is especially adapted for the family lawn, being well made, light running, and smooth cutting. Has 10-inch solid wheels, five hardened steel blades, and self-adjusting ball-bearings.

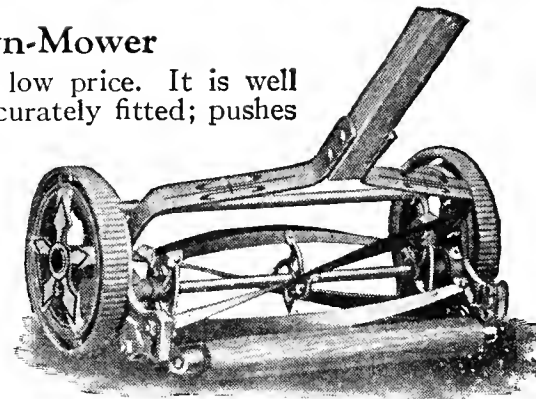
14-inch....	32 lbs.	\$8 50
16-inch....	34 lbs.	9 00
18-inch....	36 lbs.	9 25



Sturdy Lawn-Mower

A quality Mower at a low price. It is well built and all parts are accurately fitted; pushes easily and cuts cleanly, leaving a nice, smooth finish to the lawn. Has 8-inch wheels, four hardened steel blades, and self-adjusting ball-bearings.

12-inch....	30 lbs.	\$7 35
14-inch....	31 lbs.	7 50
16-inch....	32 lbs.	7 75



Pennsylvania Combined Lawn Trimmer and Edger

An efficient ball-bearing Lawn Trimmer and Edger built for durability and service. Cuts to 1/4 inch of walls, posts, trees, etc., and is equipped with steel disc and a small plow for trimming overhanging grass along the edges of paths and flower-beds. Has 4 blades; cuts 6 inches. Weight, 22 lbs. (Not illustrated.) \$10.50.

Easy-Emptying Grass-Catchers

No. 10G.	Depth 19 in., fits 12 to 18-in. Mower.....	\$1 40
No. 12G.	Depth 21 in., fits 16 to 22-in. Mower.....	1 75
No. 16G.	Depth 16 in., fits 12 to 17-in. Mower.....	90
No. 18G.	Depth 16 in., fits 16 to 20-in. Mower.....	1 10

*For 20 Years the Preference of
Users of Power Lawn-Mowers*

MOTO-MOWER

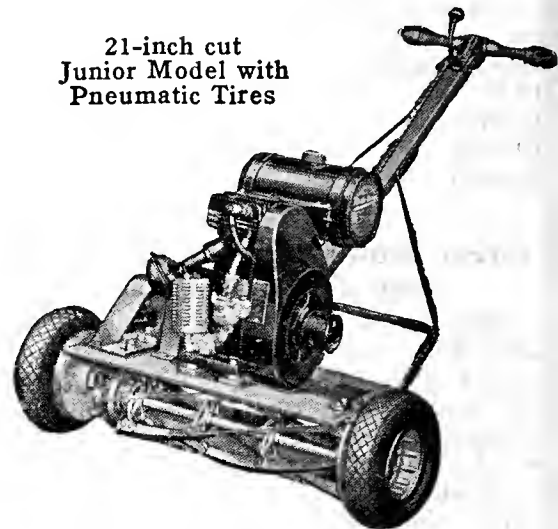
The Moto-Mower has been recognized as the leader in the field of Power Lawn-Mowers for many years. They are used and recommended by careful buyers everywhere. Every purchaser of a Moto-Mower is a pleased customer.

Junior Model Moto-Mower

YOU'LL NEVER return to hand-mowing once you walk behind a Junior Model Moto-Mower. Power lawn-mowing is effortless and efficient, and the Junior Model is such a durable machine that low maintenance expense adds pleasure to the ease of MOTO-MOWING. Automatic engine control, light weight, and low cost make the JUNIOR physically and financially easy to handle. Available in 19-inch and 21-inch cut.

Price, 19-inch cut, with slip-on rubber tires, \$127; with pneumatic tires, \$135. 21-inch cut, with pneumatic tires, \$159.

21-inch cut
Junior Model with
Pneumatic Tires



City Model Moto-Mower

For smaller lawns, the City Model Moto-Mower has proved an excellent machine. It will efficiently and easily mow $2\frac{1}{2}$ to 3 acres of grass per day. Possessing "twist-of-the-wrist" guiding, automatic engine control, and the finest construction and materials, the City Model is just as valuable and efficient a machine as the larger Moto-Mowers. Rugged motor and simplified design guarantee years of thorough, economical operation for the City Model owner.

Automatic speed-control, which the City Model possesses in common with all the other Moto-Mowers, enables the operator to set the engine at any speed he desires, and, by means of an automatic governor, the machine will run at that speed through all grades and thicknesses of grass, assuring an even, scientific cut with least exertion to the operator. Width of cut, 22 inches. Price, with slip-on rubber tires, \$217.50.



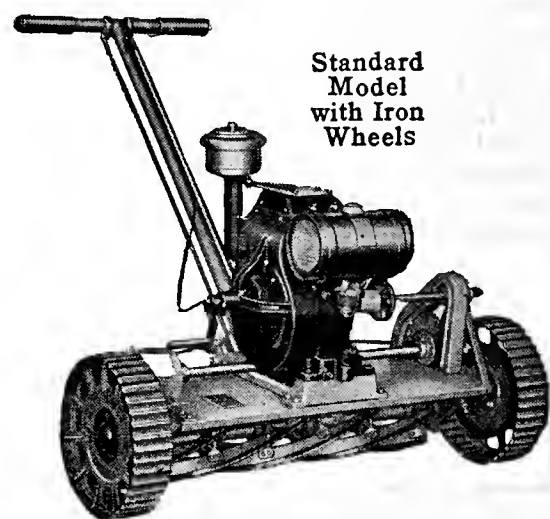
City Model Moto-Mower

Standard Model Moto-Mower

Every inch a Moto-Mower, which means rugged construction, ample power, ease of operation, and "twist-of-the-wrist" guiding. Particularly well adapted for cemetery use and will give a good account of itself on any lawn. Cutting capacity, 3 to 4 acres per day.

Is the same construction as the Super-Detroit and is powered with a $1\frac{1}{4}$ -horsepower engine. Width of cut, 24 inches. Price, with pressed steel wheels, \$262.50; with pneumatic tires, \$275.

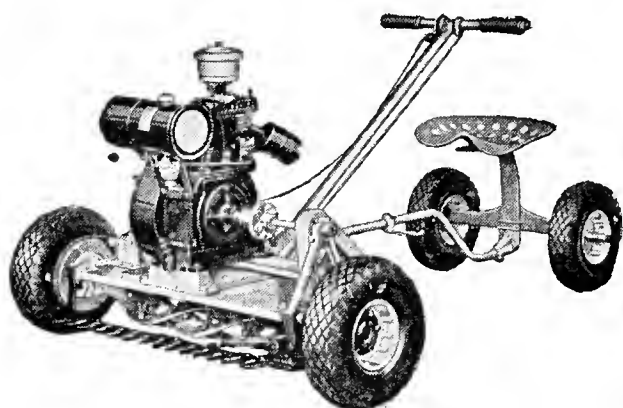
Sickle-bar available for this model.



Standard
Model
with Iron
Wheels

The Super-Detroit Moto-Mower

Possessing such sturdy construction and perfect balance, the Super-Detroit cuts every kind of grass efficiently and with least exertion to the operator. Strong and powerful though it is, "twist-of-the-wrist" guiding makes the Super-Detroit as responsive to the touch as a light Hand Mower. Consequently, the operator can now mow 4 to 5 acres per day with it every day of the season without experiencing fatigue. Recommended for country estates, parks, cemeteries and large lawns. The Super-Detroit outsells any other power mower in the same price class. Equipped with a 2.4-horsepower 4-cycle engine. Width of cut, 30 inches. Price, with iron wheels, \$325; with pneumatic tires, \$340. Can be equipped with Sulky, Trailer Cutting Units, and Sickle-bar.



Super-Detroit Model with Pneumatic Tires,
Sulky, and Sickle-bar

Catalogue Fully Describing All Models on Request, or Demonstration Gladly Arranged.

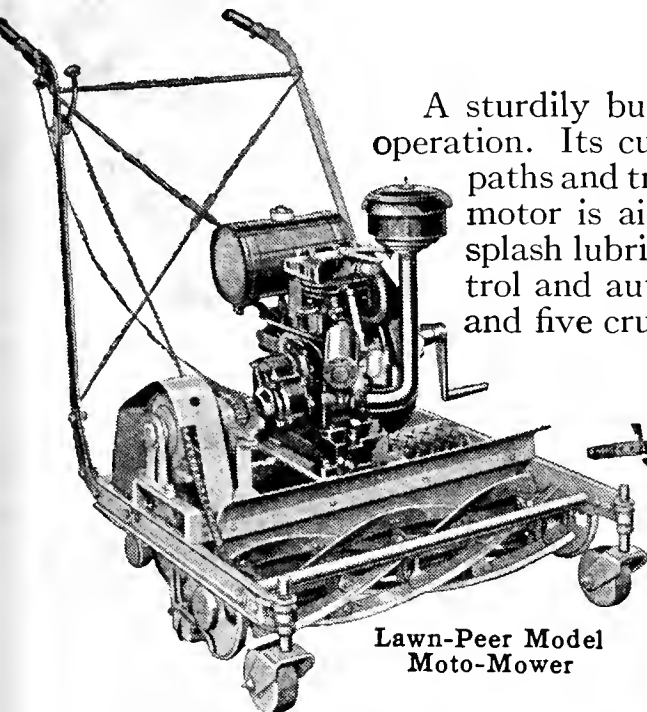
Power Lawn-Mowers

*The Test of Time Proves
Moto-Mower Leadership*

All Moto-Mowers are powered with Briggs & Stratton engines. These motors are universally recognized as tops in air-cooled gasoline engines. With 20 years' experience selling Moto-Mowers we enthusiastically recommend them.

Lawn-Peer Model Moto-Mower

A sturdily built Roller Mower that has desirable features for satisfactory and easy operation. Its cutting width is 26 inches, making it suitable for cutting narrow garden paths and trimming turf along driveways and around flower-beds and shrubbery. The motor is air-cooled, easy to start, of simplified design, and has ample power; oil-splash lubrication and float-feed carburetor fitted with air-cleaner. Has throttle control and automatic governor controlling set speed. Cutting unit has throw-out reel and five crucible steel blades, assuring a perfectly smooth cut. Price, \$300.



Lawn-Peer Model
Moto-Mower

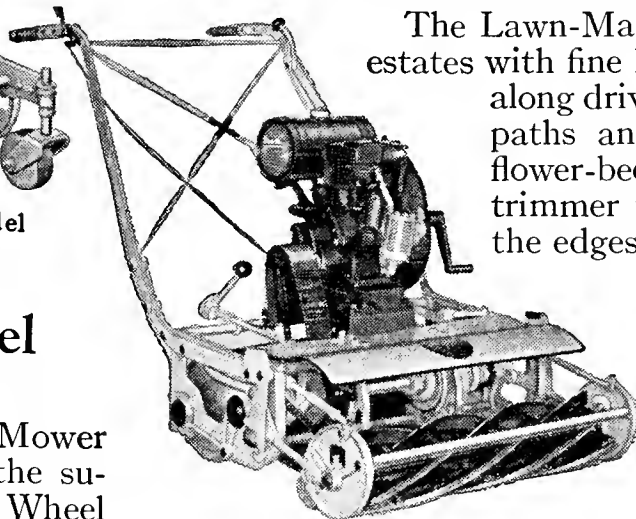
The Fleetway Model Moto-Mower

In the Fleetway Model Moto-Mower we have succeeded in retaining the superior outstanding features of our Wheel Mowers, and, in addition, incorporated the desirable features of a Roller Mower—trimming around formal plantings or along driveways, with the reel extending over edge of lawn. Equipped with 2.4 horse-power 4-cycle engine. Width of cut, 32 inches. Price, with pneumatic tires, \$400.

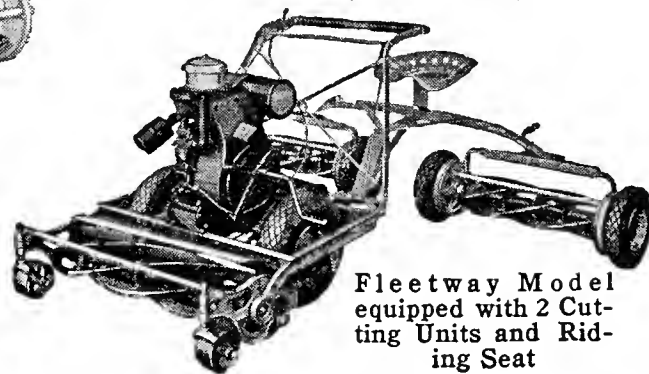
The Fleetway Model can be furnished with two 24-inch high-speed cutting units equipped with pneumatic tires and riding seat, and with this equipment cuts a 70-inch swath. It is an ideal outfit for small golf clubs, athletic grounds, parks, estates, and extensive lawn areas where large tractor-driven equipment is not practical. The frame which joins the two units may be instantly connected or disconnected from the main unit.

Lawn-Master Model Moto-Mower

The Lawn-Master is particularly recommended for estates with fine lawns which require trimming of turf along driveways. It is ideal for mowing garden paths and trimming around shrubbery and flower-beds, as the Mower may be operated as a trimmer with the cutting reel extended over the edges of depressions. The traction rollers are rubber covered. Cutting unit has neither side wheels nor front casters, and thus avoids streaking of the lawns. Price, 30-in. cut, \$400.



Lawn-Master Model
Moto-Mower



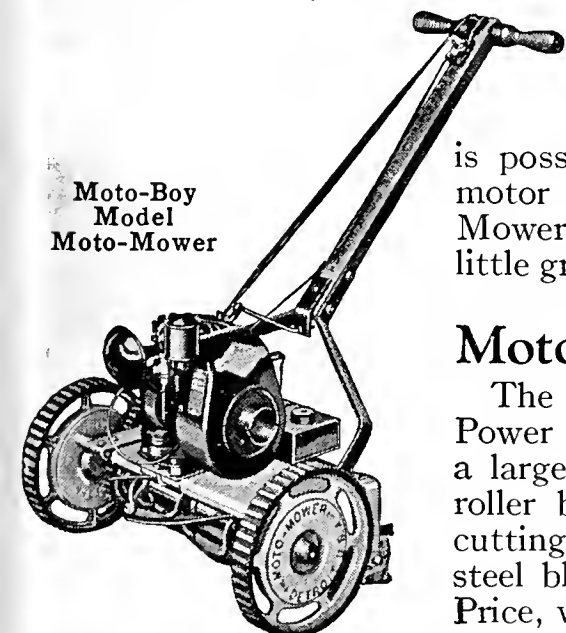
Fleetway Model
equipped with 2 Cut-
ting Units and Rid-
ing Seat

Power Cut Model Moto-Mower

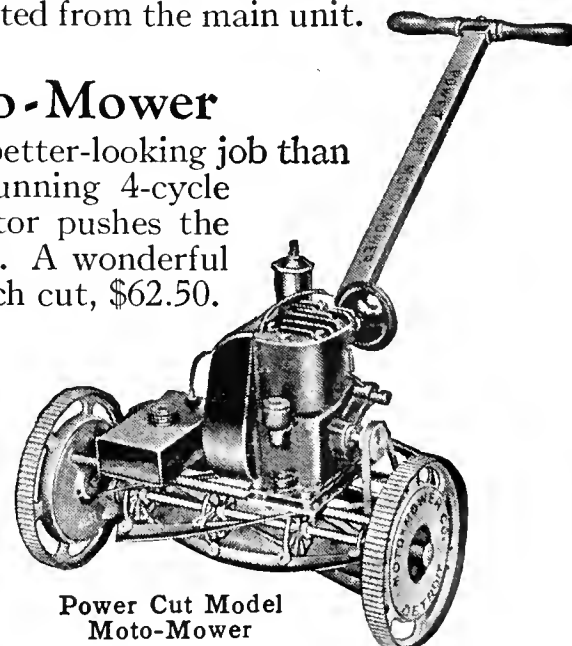
With the Power Cut you can produce a better-looking job than is possible with a hand Mower. The smooth-running 4-cycle motor propels the reel—the hard job; the operator pushes the Mower with much less effort than a hand Mower. A wonderful little grass cutter at a remarkably low price. 17-inch cut, \$62.50.

Moto-Boy Model Moto-Mower

The Moto-Boy is a reliable and well-designed Power Mower for smaller areas and places where a larger Mower is not required. It has Hyatt roller bearings in wheels, and ball-bearings in cutting reel. The cutting unit has five crucible steel blades with a cutting width of 17 inches. Price, with slip-on rubber tires, \$93.



Moto-Boy
Model
Moto-Mower



Power Cut Model
Moto-Mower

We Carry Repair Parts and Service Moto-Mowers

Boston Garden Hose



Bull Dog Cord Hose. A super-strong, super-flexible Hose—the finest Lawn Hose made. Meets the requirements of golf courses, large estates, parks, greenhouses, etc. Brown corrugated cover. Double-braided, high-quality, cotton-cord carcass. A strong, flexible Hose that will give years of service. Furnished in $\frac{5}{8}$ -, $\frac{3}{4}$ - and 1-inch sizes.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$4.60; 50-ft. length, \$8.80. Coupled.

Furnished in continuous lengths, $\frac{5}{8}$ -in. diam., 17 cts. per ft.; $\frac{3}{4}$ -in., 19 cts. per ft.; 1-in., 27 cts. per ft.



Vigilant Garden Hose. The most popular two-ply Garden Hose made. Heavy moulded construction throughout. Will stand lots of use and give years of service. Green corrugated cover.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$3.75; 50-ft. length, \$7.10. Coupled.



Vixen Garden Hose. An ideal Hose for the average home-garden or lawn. Heavy single-ply construction. From the standpoint of service it is fully equal to many of the lighter grades of two-ply Hose. Red corrugated cover.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$3.15; 50-ft. length, \$5.90. Coupled.



Tiger Garden Hose. For those who want quality at a low price. Has brown corrugated cover and heavy, single-braided cotton cord carcass.

$\frac{5}{8}$ -in. diam., 25-ft. length, \$2.15; 50-ft. length, \$3.90. Coupled.

Boston Spray Hose

Made specially for spraying purposes.

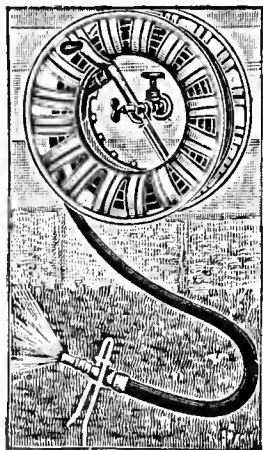
Non-Kink. Best quality 3-braid construction. Will stand 600 pounds working pressure. Any desired length. $\frac{1}{2}$ -in. diam., 30 cts. per ft.

Milo. Two-braid construction. Will stand 200 pounds working pressure. $\frac{1}{2}$ -in. diam., 15 cts. per ft.

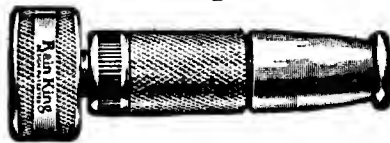
Vigo. Single-braid construction. For 100 pounds working pressure. $\frac{3}{8}$ -in. diam., 10 cts. per ft.

Detachable Hose Reel

A most convenient and practical device. The axle of the Reel fits into a special faucet which is permanently attached to the water-pipe. The Reel revolves on the faucet, allowing the hose to be pulled out as desired. When the sprinkling is finished, the hose can be reeled up readily without any handling. Diameter, 20 inches; width, 8 $\frac{1}{2}$ inches; will hold 100 feet of $\frac{5}{8}$ -inch hose. Price, including faucet, \$4.75.



Rain King Nozzle

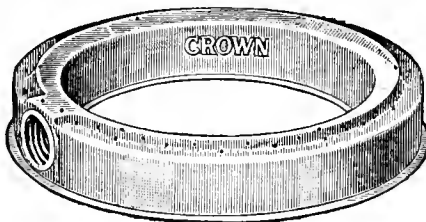
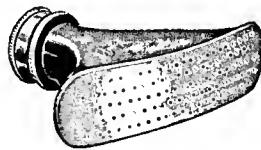


Made of solid brass, chrome plated. Precision tooled for greater accuracy. Will not stick or leak. No. N1. 65 cts. each, postage 10 cts. extra.

Flaring Rose Sprinkler

Especially adapted for sprinkling flowers, seed-beds, and new-made grass-plots. Made of brass and nickel plated.

No. 4235. Price 70 cts., postage 10 cts. extra.



Crown Fountain Sprinkler

Throws a beautiful mist-like spray up to 30 feet in diameter. Made entirely of heavy brass. No. 65. Price \$1.15, postage 10 cts. extra.

Half-Circle Sprinkler

Same as Crown Sprinkler, but throws the water in a half circle. No. 261. Price 90 cts., postage 10 cts. extra.

Greenhouse Sprays

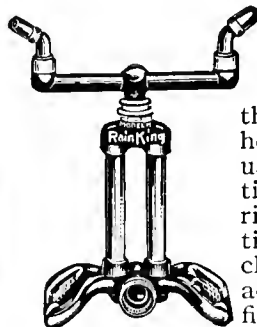
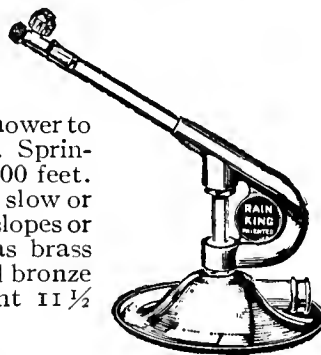
Used principally for watering in the greenhouse and hotbeds.

No. 268. Made of cast brass. Equipped with one fine and one coarse plate. Diameter of face 4 inches. \$2.50.

No. 3604. Stamped from heavy sheet brass. Diameter of face 4 inches. 65 cts., postage 10 cts. extra.

Model G Rain King Sprinkler

An entirely new type home Lawn Sprinkler that throws every known kind of spray from misty shower to soaking downpour. Sprinkles circles 12 to 100 feet. Can be set to turn slow or fast; can't stall on slopes or in high winds. Has brass arm and nozzle and bronze bearings. Height 11 $\frac{1}{2}$ inches. \$3.95.



Model H Rain King Sprinkler

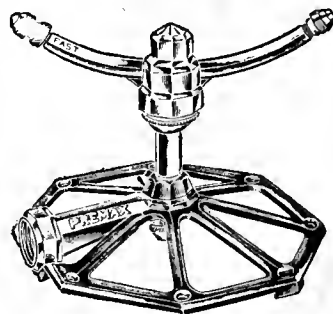
A substantial Sprinkler that is very popular with home-owners. Can be used as whirling or stationary Sprinkler. Uprights, nozzles, and fittings made of solid brass, chromium plated. Can be adjusted from coarse to fine spray. \$3.75.

Model D Rain King Sprinkler

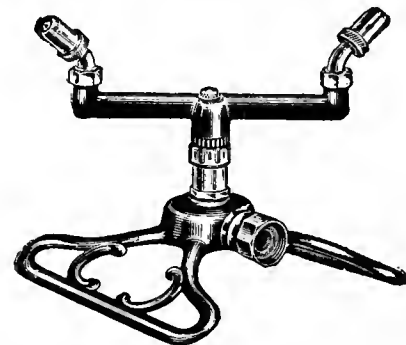
Similar to Model H in design. Uprights, arms and nozzles are polished brass. Patented nozzles are easily adjusted for any desired spray. \$2.85.

Premax Floating Head Sprinkler

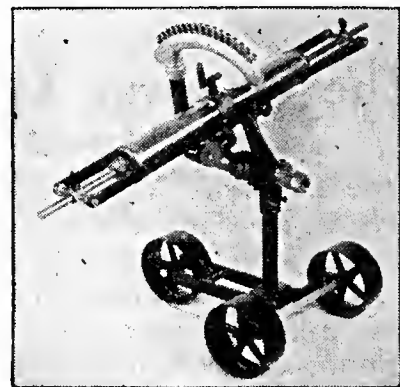
Constructed of rustproof white brass; nozzles, spindle, and bushings are of solid brass; exposed parts nickel plated. So designed that it is entirely without metal-to-metal bearings. Guaranteed a lifetime. \$2.50.



Parkside Lawn Sprinkler

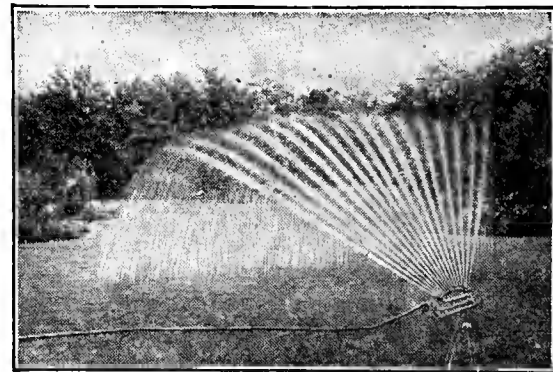


Nozzles can be adjusted for a fine mist or coarse stream, and to cover a large circle or small area. Will operate on high or low pressure. \$3.35.



White Showers Rainbow Sprinkler

So designed that it sprinkles in a square instead of circle. The Rainbow has 17 nozzles, mounted on an oscillator and waters an area as large as 50 feet square, but it can quickly be adjusted for smaller areas and also for watering narrow strips and borders. It requires only six gallons of water per minute. A high-grade, durably built Sprinkler. Weight 25 lbs. \$40.



The Waterfan Lawn Sprinkler

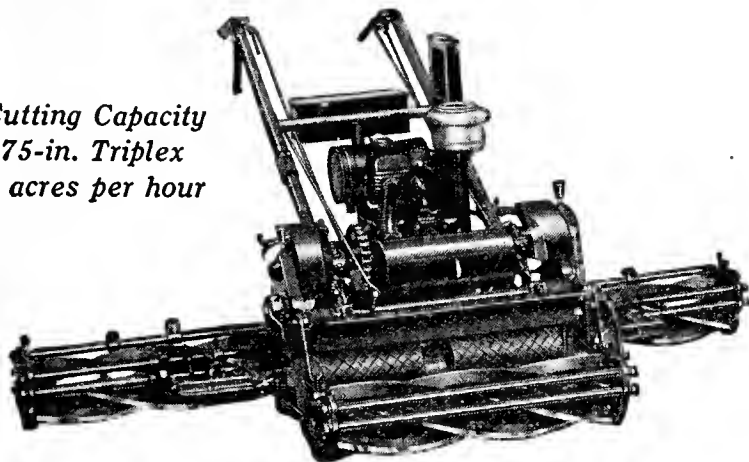
A portable, oscillating lawn and garden Sprinkler. Operated by a turbine motor. Built of brass and phosphor bronze. Covers an area 40 by 45 feet. Works best on 30 to 35 pounds water-pressure. Discharges 6 gallons per minute. \$15.



Combined Power Lawn-Mowers and Trimmers

Two machines in one. Does the complete job, mowing and trimming. No hand mowers required. Available in 25- and 30- inch cut single unit, and 70- and 75- inch cut triplex.

Cutting Capacity
75-in. Triplex
2 acres per hour



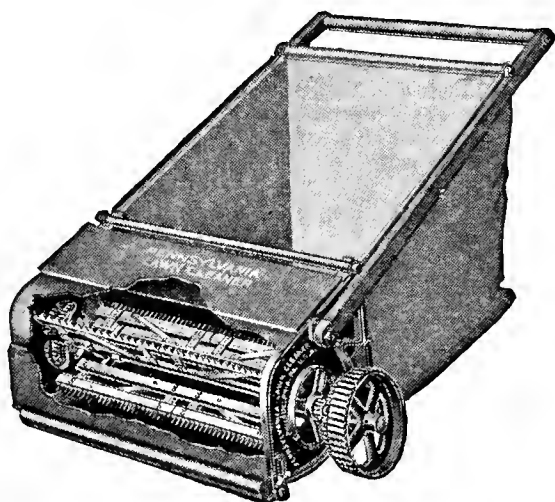
Locke 75-in. Power Lawn-Mower and Trimmer

Distinct Features

All cutting units are motor driven, full floating, and travel entirely on "cut" grass.
Cuts within 2 inches of obstructions and under shrubbery.
Does the trimming as well as cutting the open areas.
Equipped with brakes for operation on grades.
All cutting units are elevated for transportation.

Catalogue and prices on request. Ask for demonstration

Pennsylvania Lawn Cleaner and Rake



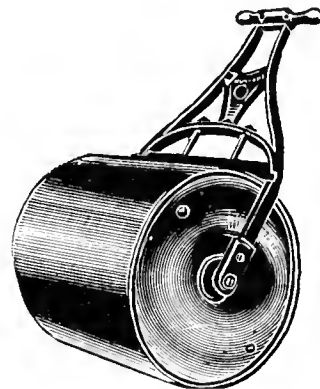
This machine will remove from the lawn cut grass and all sorts of litter, leaves, and trash. It is also recommended for the control of crab grass and other spreading weeds. The three revolving wire-tooth rakes raise up the crab grass, allowing the lawn-mower to cut the seed-pods off before they ripen, thus preventing their reappearing the following year. It is easy to operate, and with it one man will do more work than four men with hand-rakes. Brushes can be substituted for rakes. 24-in. \$35.

Dunham Water-Weight Lawn Roller

Drum made water-tight of heavy steel plates. Weight is easily increased by addition of water or sand. Has rounded edges that will not mar turf. Bronze plug prevents rusting.

Nos. 5, 7, and 9 have roller bearings and handle brace as shown in cut.

Nos. 2, 4, and 6 have plain bearings without arched brace between handles.



	Diameter	Width	Weight empty	Weight filled with water	Price
No. 2.	14 in.	24 in.	60 lbs.	175 lbs.	\$11 00
No. 4.	18 in.	24 in.	82 lbs.	265 lbs.	12 75
No. 6.	24 in.	24 in.	105 lbs.	420 lbs.	17 00
No. 5.	18 in.	24 in.	85 lbs.	265 lbs.	15 00
No. 7.	24 in.	24 in.	110 lbs.	420 lbs.	19 50
No. 9.	24 in.	32 in.	130 lbs.	565 lbs.	21 50

Prices on Horse- and Tractor-drawn Rollers, also Fairway Rollers, quoted on request

Spike Disc Lawn and Greens Cultivator

For Soil Aeration and Retention of Seed and Moisture in Turf

Lawns, putting-greens and fairways, parks, etc., require cultivation if their condition is to be maintained and improved. This can be done at moderate expense with the Spike Disc Cultivator. The high carbon alloy steel saw teeth cultivate and aerate in one operation, eliminating hard baked surfaces and forming a mulch so necessary for the retention of moisture. The Spike Disc Cultivator should be used frequently.



No. 30. Rolling width, 18 inches. Has 19 discs, each 10 in. diameter. \$27 50

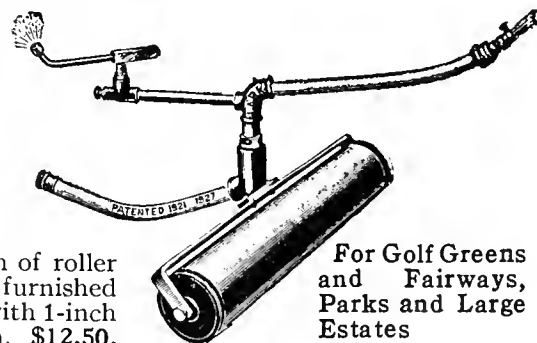
No. 32. Same as No. 30 but with two handles for two-man operation. 30 00

No. 22. For home lawns. Rolling width, 10 inches. Has 11 discs, each 10 in. diameter. 15 00

No. 25. Rolling width, 14 inches. Has 15 10-in.-diam. discs. 19 20

The "Lark" Sprinkler

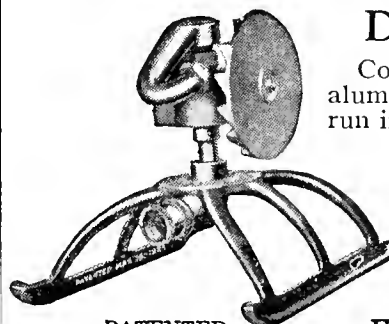
The "Lark" sprinkles evenly a circular area from 60 to 150 feet in diameter, depending upon pressure and size of nozzle used. The far-throwing main stream revolves slowly and may be broken into coarse or fine drops as desired. The whirling Rotor gives even distribution in the center. Length of roller base, 18 inches. Two nozzles furnished with each Sprinkler. Fitted with 1-inch and 3/4-inch hose-connection. \$12.50.



For Golf Greens and Fairways, Parks and Large Estates

Double Rotary Sprinkler

Constructed of the best material; cast aluminum water-wheel; bronze gears that run in a bath of oil; adjustable nozzle, sprinkles a circular area of from 15 to 80 feet in diameter. Water-pressure causes the wheel to revolve, cutting the water into rain-like drops. Will give years of wear. Ideal for homes, golf courses, parks, gardens, and large estates.

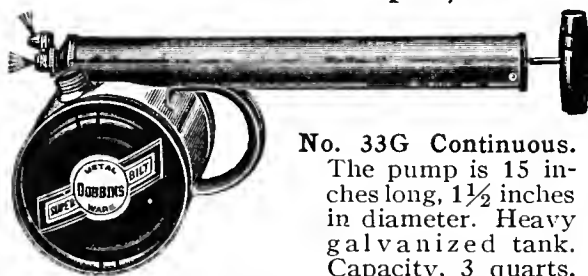


PATENTED
Heavy-Duty Model

Heavy-Duty Model. \$12.50, postpaid.

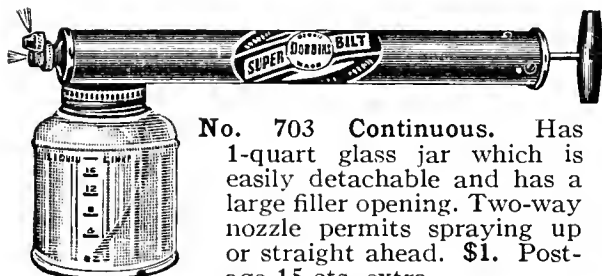
Junior Model. Built on much the same principle as the Heavy-Duty Model, but designed especially for the home-owner. \$7.50, postpaid.

Dobbins Hand Sprayers

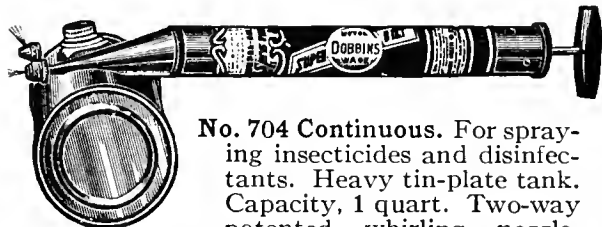


No. 33G Continuous. The pump is 15 inches long, 1½ inches in diameter. Heavy galvanized tank. Capacity, 3 quarts.

\$1.35. Postage 15 cts. extra.



No. 703 Continuous. Has 1-quart glass jar which is easily detachable and has a large filler opening. Two-way nozzle permits spraying up or straight ahead. \$1. Postage 15 cts. extra.



No. 704 Continuous. For spraying insecticides and disinfectants. Heavy tin-plate tank. Capacity, 1 quart. Two-way patented whirling nozzle.

75 cts. Postage 10 cts. extra.



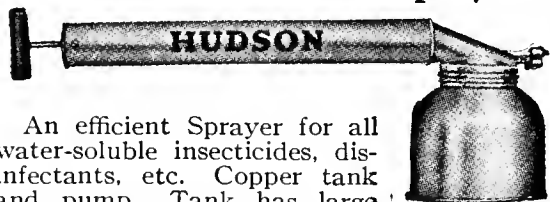
No. 700. For use about the house, garden, poultry-house, etc. Very sturdy construction. Pump 1¾ inches in diameter. Capacity, 1 quart. 40 cts. Postage 10 cts. extra.

No. 702. Pump 1½ inches in diameter. Capacity, 1 quart. 30 cts.

No. 710. Household Sprayer. Capacity, 10 ounces. 25 cts.

No. 720. Has glass container. Capacity, 4½ ounces. 15 cts.

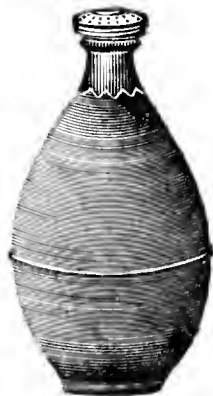
Hudson Continuous Sprayer



An efficient Sprayer for all water-soluble insecticides, disinfectants, etc. Copper tank and pump. Tank has large opening making it easy to clean and fill. May be capped and set away with liquid if desired. Nozzles adjustable for fine or coarse spray, also straight or angle as desired.

No. 429B. \$1.75.

Spra-Bulb



A rubber bulb sprinkler for spraying plants inside and outside the house. Ideal for sprinkling fresh vegetables displayed on produce stands, moistening laundry, and dusting powder on plants and animals. Spray head removable for instant filling.

B. 9-oz. capacity, 60 cts.
C. 14-oz. capacity, \$1.

Dobbins "Super" Big Head Sprayer



All of the latest improvements in Sprayer construction and design are built into this "Super" Sprayer. The tank opening is 5½ inches in diameter, which permits easy filling and cleaning. The pump is made of seamless brass tubing, 1¾ inches in diameter, 16 inches long, with patented air-valve. Has double-grip handle so that

both hands can be used for pumping. Furnished with 22-inch length of hose, 24-inch brass extension, and brass adjustable nozzle. Capacity of tank, 4 gallons.

No. 44G. Galvanized Tank.....\$6 50

No. 44B. Copper Tank.....10 50

Dobbins Big Head Sprayer

An outstanding Sprayer for spraying insecticides, disinfectants, and white-wash. The "Big Head" provides a 4-inch opening for filling and permits easy cleaning. The tank is substantially riveted, beaded, and soldered. Has high-pressure unit pump with dependable air-valve. Furnished with automatic shut-off, 22-inch length of hose, 24-inch brass extension rod, and brass angle nozzle. A really high-grade Sprayer at a moderate price.



No. 32G. 2½-gal. Galvanized Tank...\$3 95

No. 32B. 2½-gal. Copper Tank..... 7 85

No. 34G. 3½-gal. Galvanized Tank... 4 45

No. 34B. 3½-gal. Copper Tank..... 8 25

Dobbins Fun-L-Fill Sprayer



A good quality Sprayer throughout and designed to meet the demand for a Sprayer at a favorable price. Equipped with Fun-L-Fill for convenience in filling. Tank is made of heavy galvanized steel and is substantially built. Seamless brass tubing pump. Has 20-inch length of spray hose, 20-inch brass curved extension rod, and brass nozzle.

No. 19G. 2½-gal. capacity.....\$3 25

No. 21G. 3½-gal. capacity..... 3 50

Willson Dustite Respirator

Protects your nose, mouth, throat and lungs when spraying or dusting. \$2.25.

The Myers Compressed-Air Sprayer



The Myers Compressed-Air Sprayer meets all demands for this style of Sprayer. The tank is made of heavy galvanized iron or brass. The side wall is close riveted and soldered. The top and bottom are made of extra-heavy material. Has 1¾-inch brass tube air pump. Equipped with 24-inch length of hose, 18-inch brass extension and adjustable brass nozzle to spray at any desired angle.

The concave top forms an 8-inch funnel which permits easy filling. The removable discharge tube and hose connection permit thorough drainage and cleaning of the tank.

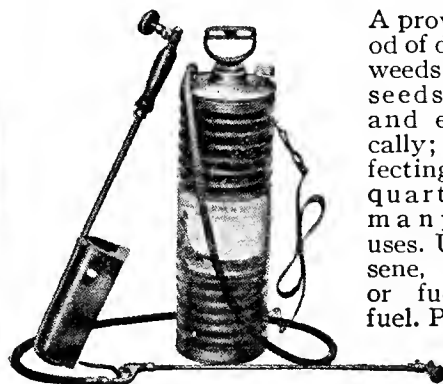
No. 2240. 2½-gal. Galvanized Tank...\$5 80

No. 2240B. 2½-gal. Brass Tank.....10 00

No. 2242. 4-gal. Galvanized Tank.... 6 55

No. 2242B. 4-gal. Brass Tank.....11 00

Aerol Weed Burner



A proved method of destroying weeds and weed seeds quickly and economically; for disinfecting animal quarters and many other uses. Uses kerosene, gasoline, or fuel-oil for fuel. Produces a

powerful reddish blue flame, 3 inches in diameter, 30 inches long, of intense heat (2000° F.). Size of flame easily controlled by a regulating valve. Anyone can operate it—absolutely safe. Average oil-consumption 1½ gallons per hour. Well constructed, light, compact, portable.

No. 99. 4-gal. corrugated, extra-heavy Galvanized Steel Tank, 2-inch Brass Pump; Pressure Gauge; 7-foot High-test Hose. \$20.

No. 99BS. Outfit No. 99 with spray attachment, as illustrated. \$22.50.

Insect-O-Gun

Kill Insects with Your Garden Hose

Attached to your garden hose, it ejects a penetrating wide-angle "fan" spray, reaching every insect in its path with telling results. Can be used with any insecticide requiring water solution. Built of non-rusting metal and will last a life-time.

Model A. Delivers 3 gallons of spray with each filling of pint jar. \$3.75.

Model B. Delivers 6 gallons of spray with each filling of quart jar. \$4.75.

Model C. Delivers 8 gallons of spray with each filling of quart jar. Designed for trees and high foliage. \$6.



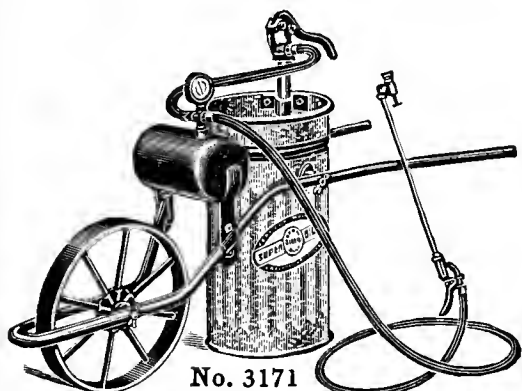
Platz Vermors Brass Sprayer

COMPACT—DURABLE—EFFICIENT



A compact and very efficient knapsack outfit, fitting the back snugly, with a strap over each shoulder. The pump will develop 40-pound pressure which is maintained with little effort until emptied. The pressure chamber is made from a solid piece of brass. The nozzle is adjustable with a cleaner attachment, and is equipped with fine, medium, and coarse spray caps, and a nozzle capable of throwing a straight stream for a distance of 40 feet. The diaphragm and two check-valves, the only working parts of the pump, are accessible, easy to replace, and inexpensive. Capacity approximately 4 gallons. Weight 16 pounds. \$20.

Dobbins Wheelbarrow Sprayer



No. 3171

This outfit is adapted for spraying small orchards, vineyards, truck gardens, in the greenhouse, and a very convenient and efficient rig for whitewashing and disinfecting poultry-houses and dairy-barns. It can be used on hillsides and uneven ground without danger of tipping. Heavy galvanized tank, capacity 12½ gallons. Equipped with 6 feet of ¾-inch 5-ply hose, 2-foot pipe extension, spray nozzle and pressure gauge.

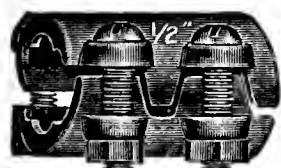
No. 3171. With air-pressure tank. . . . \$18 25
No. 3170. Without air-pressure tank. . . 12 50



Fig. 1284

Sure-Grip Hose Couplings

Made of brass. For use with power sprayers. ¾-in. or ½-in. Fig. 1284. Complete 65 cts.; female half 45 cts.



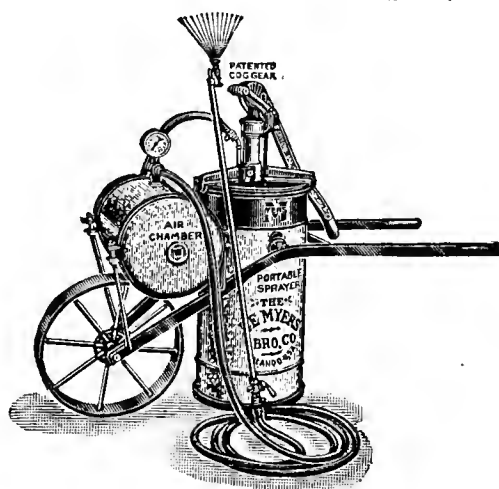
Sure-Grip Hose Clamps

Grips the hose coupling. Can't slip off. Fig. 2616. 30 cts.

Hose-to-Pipe Connection

Made of brass. Has ¼-in. pipe-thread. For ¾- or ½-in. hose. Fig. 1325. 40 cts.

The Myers Portable Sprayer



No. R339½B

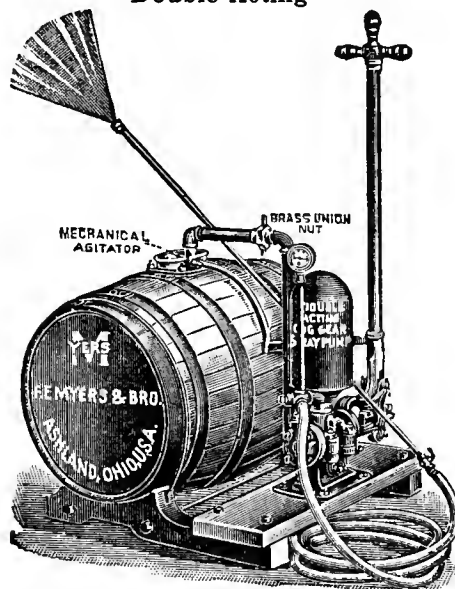
A handy outfit suitable for spraying trees, whitewashing, painting, etc. The tank is made of extra-heavy galvanized iron, reinforced at top and bottom by steel bands, and hung in the frame on trunnions. The pump is securely attached to the tank by means of a clamp connected direct to the channel iron that surrounds the top of the tank held in position by one thumb-screw. Pump is fitted with dasher agitator. The handle can be located at any point desired.

Equipped with 15 feet of ½-in. hose, 8-foot extension, and Vermorel nozzle. Capacity 12½ gallons.

No. R339½B. With air-chamber. . . . \$42 50
No. R336½B. Without air-chamber. . . 26 50

Myers Cog Gear Spray Pump

Double Acting



This is our most popular Barrel Spray Pump, and is recommended to those who require a Sprayer of exceptional capacity and durability. A constant high pressure can be maintained with little or no exertion, and one man can operate this pump without fatigue.

With brass valves and ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp-packed plunger, double lever shut-off discharge.

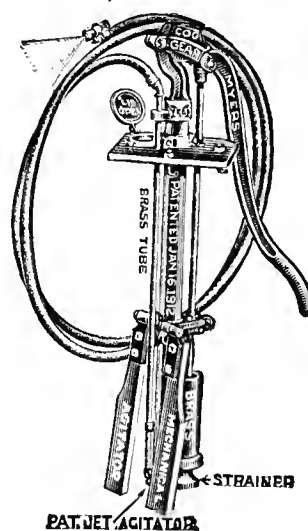
Adapted for spraying under heavy pressure. Will fit in an ordinary farm wagon box.

No. R316B. Pump complete, 50-gallon barrel mounted on skids, with pressure gauge, 15-foot lead of ¾-inch 7-ply discharge hose, nozzle, 8-foot pipe extension, lever shut-off and mechanical agitator. \$60

Y Connection

For 2 leads of hose. Made of brass. For ¾-in. pipe inlet. Fig. 541. \$1.20.

Myers Barrel Spray Pump

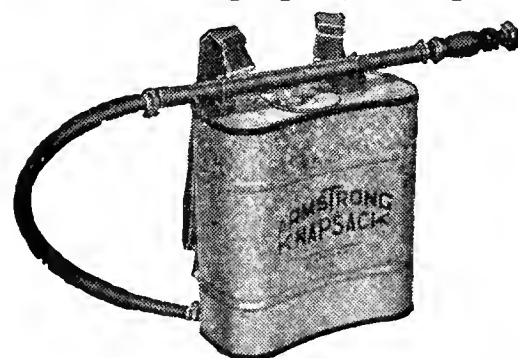


The Myers Barrel Spray Pump is designed to meet the requirements where a good Pump at a moderate price is desired. It is a thoroughly serviceable Pump, well made, simple in construction, and is recommended to the farmer with an ordinary sized orchard. Has bronze ball valves and brass seats.

No. R318B. Myers Cog Gear Barrel Spray Pump, with one lead of

15 feet of ½-inch 5-ply discharge hose, graduating Vermorel nozzle, and mechanical agitator, without barrel, \$17.

Armstrong Spray Pump



The Armstrong is a very simple and powerful Sprayer and is ideal for spraying liquid insecticides of all kinds.

Will produce sprays of varying fineness—from a mist to a straight stream that carries 60 feet. Tall trees may be sprayed from the ground.

For spraying truck crops, such as potatoes, the knapsack and curved extension are used with the Pump. The Spray Pump is made entirely of brass.

Armstrong Spray Pump. \$4 75
Galvanized knapsack. Capacity 5 gals. . 5 35
Curved extension. 19 inches long. . . . 80

Power Spray Guns

Designed for use with any power spray pump.



No. 13

No. 13. Myers. Will discharge a long-distance spray by means of which the top of the highest fruit tree can be reached, or it can be instantly changed to a very broad spray or shut off entirely. Hose swivel removes all twists in the hose. \$8.

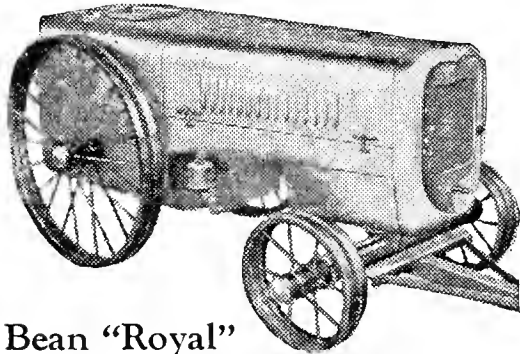
Bean "Fog-Drive" Guns. They produce a fine fog spray with long-distance drive and assure complete coverage of both sides of all leaves and blossoms, using the minimum amount of spray mixture. The nozzle-head, rod, and handle are made of aluminum alloy. Rod is 39 inches long.

No. 773. 3-nozzle gun. \$9 50
No. 774. 4-nozzle gun. 11 00
No. 776. 6-nozzle gun. 15 00

Bean Shade Tree Spray Gun. Designed especially to throw the spray material to great heights and give complete coverage of the tree without waste of spray material. No. 872A. Complete with adjustable nozzle and lever shut-off. \$25

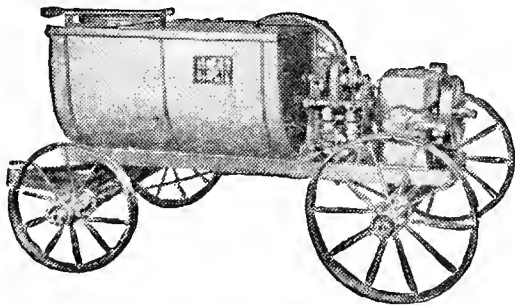
Bean Fruit and Crop Sprayers

FOR ORCHARDS



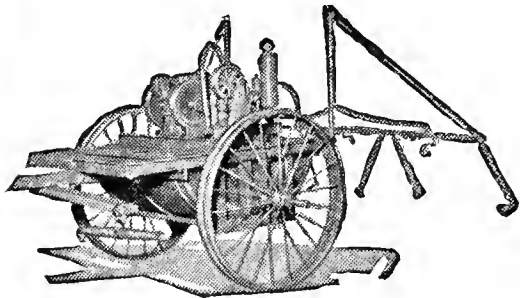
Bean "Royal"
Armored Sprayer

SMALL ORCHARD SPRAYER



Bean Little Giant Duplex
Sprayer, Outfit 3206

CROP AND ORCHARD
COMBINATION SPRAYER



Bean General Purpose
Sprayer, Outfit 3208-P



Bean
Greenhouse
Sprayer

A SPRAYER FOR EVERY PURPOSE

In making the decision as to what Sprayer you will buy, the most important consideration is not what the Sprayer consists of, but what it will do for you in giving you efficient protection. You need Sprayers that will reach every part of the tree or crop to be sprayed, at sufficient pressure to guarantee perfect results.

No one has ever questioned the efficiency of Bean Sprayers. This year the Bean line offers any size, any type of Sprayer that you may need at prices in proportion to the work to be done.

Bean also manufactures Fruit Washers, Fruit Wipers, Fruit Cleaners, Potato Cleaners, and Potato Graders.

Bean "Royal" Armored Sprayer

An outstanding all-purpose Sprayer for orchard work. It is made of steel throughout, with leakless steel tank proofed against corrosion and fully enclosed. Low construction allows the outfit to go under tree branches, short wheel-base for easier hauling and shorter turning, and countless other improvements that offer the greatest Sprayer value of a lifetime. Built for continuous operation at pressures of 600 to 700 pounds. Powered with famous 4-cylinder Hercules engine. A Sprayer you will be proud to own and use. Available in several sizes and types. Catalogue and prices on request.

Bean Little Giant Duplex

Many growers have a limited number of acres of fruit, yet high-grade, clean fruit means just as much to them as it does to the commercial grower with large orchards, therefore they try to give their trees the best of care. You will not be handicapped in your work as you have been in the past because this Little Giant Duplex Sprayer gives you real high pressure and efficient spraying at an investment that is in proportion to the amount of orchard to be cared for. You can now get the results you desire in efficiency, capacity, and economy at a reasonable first cost. Price without hose and guns, \$325 f.o.b. factory.

Bean General Purpose Sprayer

Growers with average acreage of potatoes or other crops desire a medium-capacity, medium-priced, yet efficient Sprayer for their work. Outfit 3208-P, as shown at left, represents exceptional value in every respect. In the first place, it has capacity for 4-row boom and it has pressure for efficient spraying. The 4-row (3 nozzles to the row) boom works at a pressure of 250 to 300 pounds, and for orchard work with the hose and gun it maintains 300 pounds pressure easily. It has special, strong, rigid frame construction, large wheels for easy draft, and it is very close to the ground, yet allows ample clearance for row crops. Price without hose and guns, \$415 f.o.b. factory.

Bean Greenhouse Sprayer

The Bean High-Pressure Greenhouse Sprayer offers a unit that meets exclusively all requirements for greenhouse work. For a small investment you get an outfit that is faster and more efficient than the old hand method. It has a 2-cylinder pump with a capacity of $3\frac{1}{2}$ gallons per minute at 300 pounds pressure. It is compact in construction, being only 18 inches wide, 40 inches high, and 27 inches long. Tank has a capacity of 30 gallons and is made of steel proofed against corrosion. Solid rubber tires are standard equipment. Price with $\frac{3}{4}$ h.p. Electric Motor, \$175; with 1 h.p. Gasoline Engine, \$195. (Hose and Gun extra.)

Bean Estate Sprayer

Similar in design to Bean Greenhouse Sprayer. Has 50-gallon steel tank and pneumatic rubber tires, 26 inches outside diameter. Price with $\frac{3}{4}$ h.p. Electric Motor, \$190; with 1 h.p. Gasoline Engine, \$210.

Bean Sprayers are built in many types and with many pump and tank capacities. Complete catalogue and prices gladly sent on request

Spraying and White-washing Machines

Myers Little Giant Sprayer

This Spray Pump is constructed entirely of brass. It is so arranged that the labor of pumping is all done on the downward stroke of the piston and nothing on the up. The effect of this operation while pumping is to hold the pump down. The foot-rest steadies the pump, holding it in position.

It is provided with a large air-chamber. The nozzle throws a continuous spray and is not affected by the movement of the plunger. Will throw a solid stream 50 feet.

No. 327½. Complete with hose and Imperial combination fine- and coarse-spray and solid-stream nozzle, \$4.50. Whitewash Nozzle, extra \$1.20.

Dobbins Bucket Spray Pump

Designed for use with whitewash, cold-water paints, and insecticides. All working parts are brass. Valves and nozzle parts easily accessible for cleaning. Cylinder of seamless brass tubing. Dasher-type agitator which operates on each stroke of pump and keeps material in solution and thoroughly cleans strainer screen.

No. 3140. Complete with 3 feet of ¾-inch spray hose and 12-inch extension rod. \$6.25.

Binks, Style H

The applications for this Sprayer are almost unlimited. It will spray efficiently whitewash, disinfectants, and insecticides, and will be found invaluable for industrial plants, dairy barns, poultry-houses, etc.

Tank is of extra-heavy, galvanized steel and holds 5 gallons. Furnished complete with 10-foot, ¾-inch discharge hose, spray pipe, shut-off valve, and nozzle ready for work. \$15.

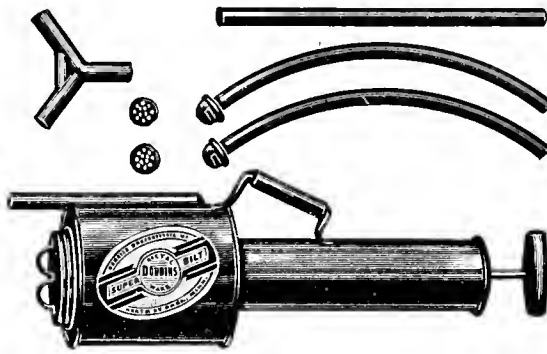
Style H

Hudson Electric Paint Sprayer

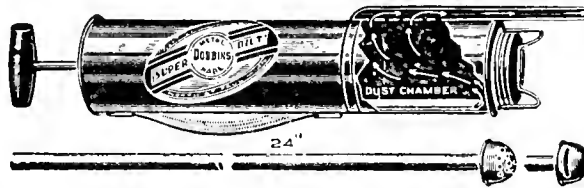
A very efficient Sprayer for applying paints, lacquers, enamels, house paints, and similar preparations. Can also be used for insecticides and disinfectants. Has two nozzles: one produces a cone-type spray, the other a flat fan-shaped spray. Nozzle adjustment produces any desired density from a heavy, wet spray to a fine floating vapor. Regularly furnished with pint glass jar. Special thumb operated shut-off valve permits instant control.

Has 1/10 H.P., 110-120 volt, A.C. or D.C. Motor equipped with 10 feet of rubber insulated cord, carrying strap and carrying handle. No. 305. \$17.75.

Dobbins Hand Dusters



No. 120. A powerful, new-type Duster suitable for dusting all garden plants, small trees, and shrubbery. Discharge equipment permits dusting two rows at one time. Capacity, 3 pounds of dust. \$2.95.



No. 132. Handles all kinds of dry dust very efficiently. It is used in the home-garden, on truck-plots, around poultry-houses, etc. Furnished with 24-inch extension tube and two nozzle caps. Capacity, 1 pound. \$1. Postage 15 cts. extra.



No. 140. A favorite for dusting about the home against roaches, ants, flies, mosquitoes, etc. Pump 10 inches long. 40 cts.
No. 110. Pump 5½ inches long. 20 cts. Postage 10 cts. extra.

Woodason's Insect Powder Bellows



Just the thing for dusting insecticides in houses and gardens. Particularly adapted for eradicating bedbugs and roaches. Being strong, it blows the powder well behind the woodwork and into the cracks where the insects breed. It is exceptionally well made of high-grade materials. Small size \$3.25; large size \$4.75.



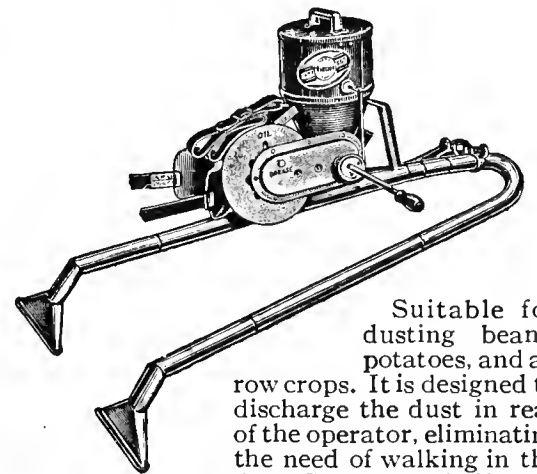
Have every feature you want in a Garden Glove: All-leather; dirtproof; durable; soft; comfortable; washable. Easy on the hands and easy to wear. Outwear 6 pairs ordinary fabric gloves. Sizes for Women (Small, Medium, Large); for Men (Medium, Large). 75 cts. per pair, postpaid.

The Root Hand Gun



The ideal Dust Gun for dusting all kinds of agricultural dusts where the acreage is not large enough to justify the use of traction or power dusters. The gears are bronze and run on ball-bearings packed in grease. Duster is perfectly balanced, easy to carry and operate, and weighs only 12 pounds with hopper empty. Has a powerful fan-blast which thoroughly breaks up the dust and distributes it evenly and uniformly. Can be operated with discharge tube in front or to the rear of the operator. The hopper has a capacity of 7 to 10 pounds of material. Built to stand hard knocks and rough usage. \$17.50. With 12-in. flexible Y (2 outlets) \$19.75.

Dobbins Universal Duster

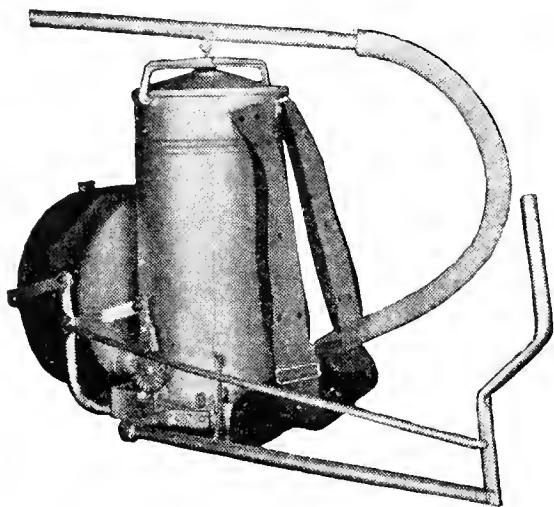


Suitable for dusting beans, potatoes, and all row crops. It is designed to discharge the dust in rear of the operator, eliminating the need of walking in the dust. Constructed of heavy lead-coated steel. Steel cut gears run in oil and contained in dust-proof case. Feeding device positively regulated by handy control and volume indicator. High-speed fan runs in bronze bearings. Equipped with attachments for dusting one or two rows. Discharge adjustable to any angle and for various widths of rows. Capacity 5 to 10 pounds, depending on material used.
No. 200. \$12.70.

No. 100 Dobbins Duster. A well-made Duster with many important features of the No. 200 Duster. Comes complete with attachments for dusting one or two rows. Capacity 3 to 6 pounds of dust. Recommended to those desiring a smaller capacity and lower priced Duster. \$9.35.

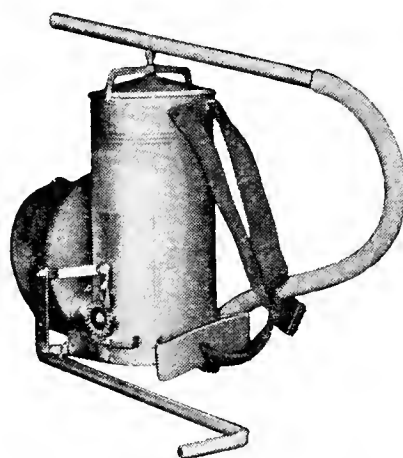
Traction or Power Dusters

If you are interested in a larger Duster, please write for special catalogue and prices.



American Beauty Duster

Suitable for row crops or orchards. Will dust trees up to 25 feet in height. Weight 16 pounds. Holds 15 pounds of dust. \$22.



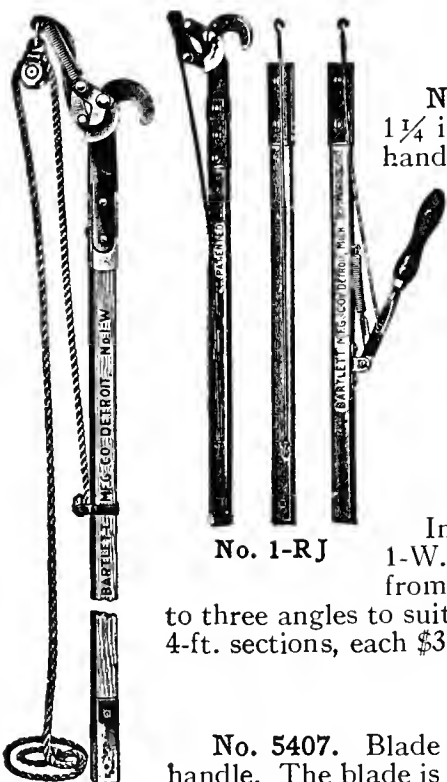
California Beauty Duster

The very Duster for truck crops, such as potatoes, peas, beans, cabbage, etc. There are no rapidly revolving parts to give trouble. Weight 11 lbs. Holds 12 pounds of dust. \$16.



Platz Double-Action Duster

The double bellows insures a steady flow of dust, and is better adapted for dusting a denser growth of foliage. The 44-inch discharge pipe, with its adjustable spreader, is sufficiently long to dust the underneath side close to the ground, as well as to throw a cloud of dust 20 feet in the air. Weight 17 pounds. Capacity 20 to 30 pounds. \$22.



No. 1-RJ

Bartlett Tree Trimmers

No. 1-RJ Compound Lever Type. Built for heavy work and will cut a limb up to 1 1/4 inches in diameter. Rod connects the knife lever along one side of the pole to the handle lever on the opposite side, which allows the rod to cross the pole and results in half of the strain on each side of the pole, giving about double strength. This is a jointed pole pruner and has several advantages over a solid pole type of pruner. Sections are joined by means of brass sleeves making the tool perfectly rigid. 8-ft., 2 sections, \$6.75; 12-ft., 3 sections, \$7.50; 16-ft., 4 sections, \$8.25, postpaid.

No. 1-W Pulley Type. Furnished with jointed pole. Has rope-operated cutting head. Each section is 4 feet long and equipped with brass sleeve body on one end and brass ferrule on opposite end. As many of the lower sections can be used as desired. An ideal pruner for use near high-tension power lines. 4-foot top section \$7.50; extra 4-foot sections, each \$3, postpaid.

No. 44 Bartlett Pole Saw

Intended for use where the limbs are larger than the capacity of the No. 1-RJ or No. 1-W. The saw blade is 16 inches long and securely held by the head, which is stamped from cold rolled steel and fastened to the pole by three bolts. The blade can be adjusted to three angles to suit the operator's position. 4-ft. Jointed Pole Saw with brass ferrule attached, \$4.10; 4-ft. sections, each \$3. 8-ft. Solid Pole Saw, \$4.40; 10-ft. Solid Pole Saw, \$4.70; 12-ft. Solid Pole Saw, \$5.



No. 44

Clyde Tree Trimmer

No. 5407. Blade and hook are made from the best tool steel, firmly riveted to selected basswood handle. The blade is held open by means of a coil spring from the lever handle to the pole. A well-made Trimmer at a low price. 8-ft., \$2; 10-ft., \$2.25; 12-ft., \$2.45; 14-ft., \$2.65.

No. 1-W

No. 5407



Porter HKP. Forester

Patented slide shift gives amazing multiplication of cutting pressure. No strain on tool or operator. Cuts close up, two sharp cutting blades.

No. 1. For average pruning. 20-in. . . . \$5 00

No. 2. For general farm and orchard work. 27-in. 6 00

No. 3. For brush clearing and heavy pruning. 34-in. 7 00

Porter HKP. Pointcut Pruner

The blades are so designed that suckers are cut on the point with minimum handle opening and limbs up to 1 1/4 inches in diameter with full handle opening. It is in reality two tools in one.

No. 4. 20-in. \$5 00

No. 6. 27-in. 5 20



Cuts 1 1/2-inch limbs with ease. Length 24 inches. \$3.

Tiffany "Hammer-Forged" Pruner

Forged from special steel and tempered to stand the strain and hold a keen edge. Put together with a heavy rivet under tremendous pressure, no nuts to work loose.

No. 777 Bartlett Tree Pruner

A Pruner designed on scientific principles and built to stand up to the work. The blade positively will not cut or dig into the hook. Both blade and hook are hardened drop forged crucible tool steel. Handles white ash, 26 inches long. \$4.25.

Clyde Hand Pruner

An excellent tool for an occasional job. Blade and hook hammer forged from carbon steel, hardened and tempered. Ash handles securely held to head by two rivets. A well-made Pruner at an attractive price. \$1.25.

FOR TREE PAINT, SEE
PAGE 64



No. 777



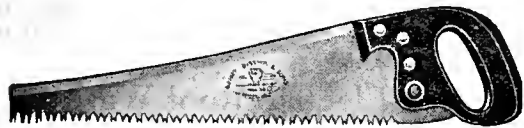
No. D-127 Disston's Pruning Saw

A 10-inch section at point of blade is made 6 points to inch; rest of blade has "lumberman" teeth. The fine teeth are for starting cut. Blade 26 inches long. \$4.35.



No. 7 Disston's Pruning Saw

An old stand-by. Designed for general pruning. Blade of Disston steel, taper ground; cross-cut teeth, 8 points to the inch. Hardwood handle, open grip; three brass screws. Blade 18 inches long. \$1.60.



No. 32 Disston's Pruning Saw

Just the tool for foresters and orchardists. Steel blade 20 inches long, 5 inches wide at butt, 1 inch wide at point. Champion teeth. Hornless handle of beechwood. Dowel pin through grip gives unusual strength to the handle. 20-inch blade, \$2.80; 24-inch blade, \$3.35.



No. D27 Disston's Pruning Saw

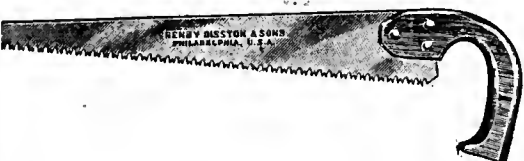
Designed for the professional. Steel blade 26 inches long, 6 inches wide at butt, 1 1/4 inches wide at point; 6 points to the inch. Cuts on both draw and push stroke, either dry or green wood. \$4.



No. K40 Disston's Keystone Pruning Saw

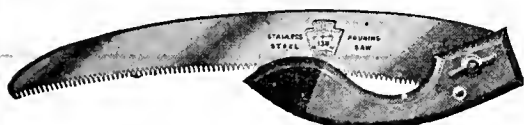
Steel blade with double straight-edge; one edge, 8 point cross-cut teeth and other edge "lumberman" teeth. Blade secured to hardwood handle with three rivets.

16-inch \$1.20; 18-inch \$1.30; 20-inch \$1.40.



No. 14 Disston's Pruning Saw

Has "Champion" teeth which cut unusually fast on both draw and push stroke. Blade 22 in. long, 3 1/4 in. wide at butt, 1 1/4 in. at point. Large, open-grip handle. \$2.25.



No. 138 Disston's Pruning Saw

Folding handle makes it convenient to carry in pocket. Stainless steel blade, 12 inches long; 8 point needle teeth. Cuts on draw stroke. \$2.35.



No. 15 Disston's Pruning Saw

Steel blade 14 inches from center to center of hole, 1 inch wide, 8 points to the inch; adjustable; cuts on both draw and push stroke; swivel on both ends; wing-nut tightener. \$2.35.

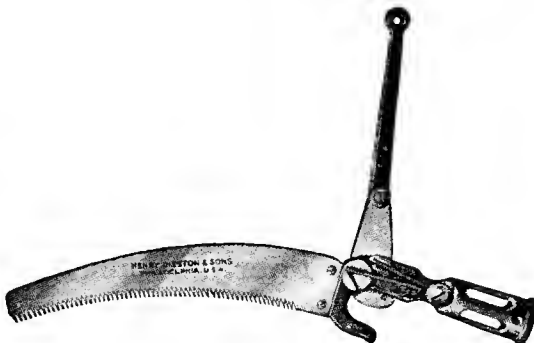


Disston's No. 166 Pruning Saw

A good, strong, practical tool with 14-inch crescent-shaped steel blade; 1 1/2 inches wide at handle; teeth on concave edge to cut on draw stroke; 8 points to the inch. \$1.40.

No. 168. Similar to No. 166 but cuts on both draw and forward stroke. \$1.65.

No. 55 Orchard Pruning Saw and Shear

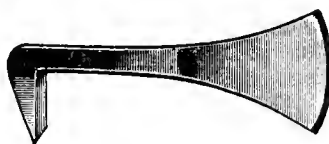


A combination tool—saw and shear. The curved blade makes it easy to engage and to saw the higher branches of a tree when using a pole. The blade of the saw is 9 1/2 inches on cutting edge.

Shear frame and socket is made of malleable iron. Blade shaped to cut with a shearing motion. The hook will take a 3/4-inch or smaller limb. Shear blade is 4 inches long with 1 1/2-inch cutting edge. Spring returns knife to open position. Price, without pole, \$3.75.

No. 114 Pruning Saw. Same as No. 55 except blade is 14 inches long and without shear. \$2.45.

Pruning Poles. Made of basswood, 12 feet long. \$1.50.



Tiffany Grafting Tool

Forged from one piece of fine crucible steel. It makes clean splits and does not tear the bark or split the stub too far. Length 8 inches. \$1, postpaid.



Tiffany Improved Tree Scraper

A handy tool for removing loose bark that harbors insects. Made of thin forged spring steel. Length 12 inches. \$1, postpaid.

Pruning Shears



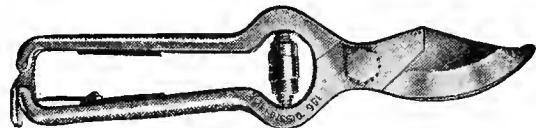
Disston's No. 116. Malleable iron with blade of high carbon steel, hardened and tempered. Thread and lock-nut tension adjustment. 9-inch. \$1.



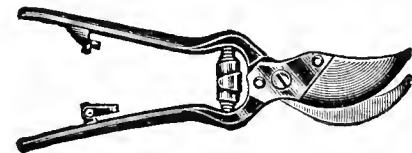
Disston's No. 146. Solid drop forged tool steel. Blade hardened, tempered, ground and polished. Thread and lock-nut tension adjustment. 9-inch. \$1.50.



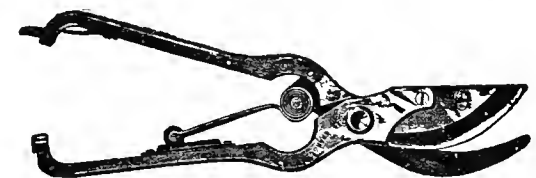
Disston's No. 136. Drop forged tool steel with detachable, high carbon tool-steel blade; hardened, tempered, ground and polished. 9-inch. \$1.25.



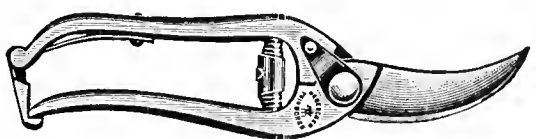
Disston's No. 156. Drop forged high carbon steel with double riveted, detachable blade of alloy steel; hardened, tempered, finely ground and highly polished. Has patented tension adjustment. 8 1/2-inch. \$3.50.



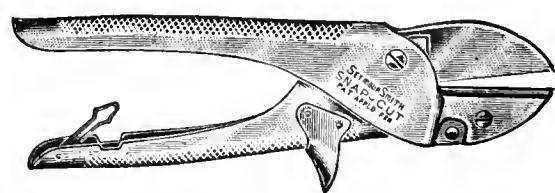
Boker's No. 550. Polished oval Rieser pattern hand-forged high carbon blade and hook. Volute spring. Lock nut and bolt. 9-inch. \$1.



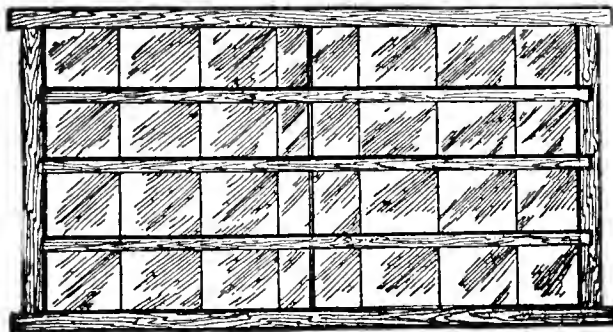
Genuine French Shears. Forged tool steel blade. Drop forged handles. Wheel-spring type which insures easy, positive action. 9-inch, \$3; 11-inch, \$3.50.



Henckels' Double-Cut Pruner. Made especially for rugged work. Forged steel blades. Very handy for cutting roots and tubers. No. 192. 8 1/2-inch. \$5.50.



Snap-Cut Pruner. The special hardened tool steel blade cuts onto a soft metal anvil with a powerful drawing or slicing action that cuts a 3/4-inch branch with surprising ease. Makes a perfect clean cut on large or small branches. All-steel construction. No. 119. 7 3/4-inch. \$2.



Metropolitan Hotbed Sash

Metropolitan Hotbed Sash are made from select quality air-dried Tidewater Gulf cypress, fabricated and finished on specially designed sash-making machines. All parts are mortised and tenoned to insure accurate, smooth, and tight-fitting joints. The sides are planed perfectly straight to prevent any open space between sash when laid on the frame. They are strictly a quality product.

No. 13. 3 ft. 2 in. x 7 ft. for 4 rows of 8-in. glass.....\$4 25

No. 18. 4 ft. x 6 ft. for 5 rows of 8-in. glass.....4 45

Above sash 1 3/4 inches thick with round iron cross-bar in center and with horns.

No. 8. 3 ft. 2 in. x 6 ft. for 4 rows of 8-in. glass.....\$2 90

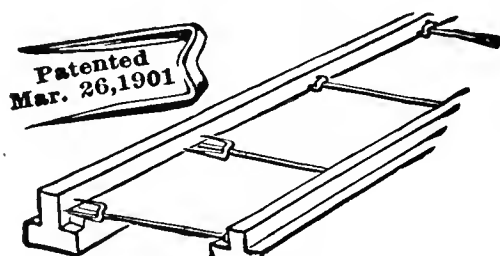
Above 1 3/4 inches thick, with horns and wood cross-bar.

All Sash are unpainted and without glass at prices quoted. 5-sash lots, 15 cts. per sash less; 10-sash lots, 30 cts. per sash less. Special prices on larger quantities or other sizes of sash quoted on request.

Glass for Hotbed Sash

We carry in stock Lustra Glass, also Pennvernion Glass, both flat drawn and made by a new process.

Per box
6 x 8, 150 lights, B, Single Strength. \$5 10
8 x 10, 90 lights, B, Single Strength. 4 70
10 x 12, 60 lights, B, Single Strength. 4 70
8 x 10, 90 lights, A, Single Strength. 5 30
10 boxes and upward, 25 cts. per box less than above prices



Peerless Glazing Points (Improved Van Reyper)

Used by all practical florists and market-gardeners for glazing hotbed sash. No. 1. For small, single-thick glass. No. 2. For large, single-thick glass. No. 2 1/2. For double-thick glass. All sizes, 75 cts. per 1,000, postpaid.

Zinc City Greenhouse Points. Made from pure zinc. 5/8-in. or 7/8-in., 1-lb. pkg. 65 cts. Star Brand Triangle Glaziers Points. Zinc coated. No. 00 size, 1/2-lb. pkg. 20 cts.

Mastica Glazing Compound

Mastica is elastic and tenacious. In a few hours after use, a skin or film is formed, preventing the evaporation of the oils and leaving it pliable for years. One gallon will cover about 290 running feet, one side. Quart can 85 cts., postpaid \$1. Gallon can \$2.65, postpaid \$2.90.

Mastica Glazing Machine. For applying Mastica. \$3.25, postpaid \$3.50.

Densoplastic (Glazing Putty)

A scientifically formulated permanent, elastic, exceptional adhesive glazing Putty for glazing, reglazing, and repairing of hotbed sash and greenhouses. Can readily be removed with a putty knife, thus permitting the easy replacement of broken panes. COVERAGE: 300 lineal feet of bar per gal., with 3/8-in. nozzle.

Natural Color

1-gal. can.....	\$2 65
5-gal. pail.....	12 75
20-gal. drum.....	44 00
30-gal. drum.....	64 50
55-gal. drum.....	115 50

Black Color

5-gal. pail.....	\$9 50
20-gal. drum.....	32 00
30-gal. drum.....	46 50
55-gal. drum.....	82 50
Glazing Gun.....	4 00

Glazing Gun free with 55-gal. drums.

Denso-White (White Paint)

An exceptional white paint especially formulated to the proper consistency for cutting in around sash, making it particularly adaptable for the painting of hotbed sash and greenhouses. COVERAGE: 400 square feet per gallon, one coat.

1-gal. can.....	\$3 25
5-gal. pail.....	14 25
30-gal. drum.....	82 50
55-gal. drum.....	148 50



Hotbed Thermometer

No. 5981. Registers from 30° to 230° F. Length over all, 15 1/2 inches. \$2.75, postpaid.

Red Devil Glass Cutters

No. 024. Single wheel.....	\$0 20
No. 48. Bronze turret controlling six wheels.....	35

Hydrofluoric Acid

Used for cleaning hotbed and greenhouse glass.

1 lb. in wax container.....	\$1 25
10 lbs. in lead jug.....	7 50
115 lbs. in hard rubber drum.....	35 00

Allowance for lead jug, \$3.50, and hard rubber drum, \$15, when returned.

Putty Bulb

A simple and useful device for applying putty or glazing compound to sash. \$1.50.

Rubber Bands

Made from pure crepe rubber. For bunching vegetables. No. 10 (1 1/4 x 1/8 in.) or No. 12 (1 3/4 x 1/8 in.) in 1-lb. boxes, 75 cts. per lb.; 10-lb. lots, 70 cts. per lb.; 25-lb. lots, 65 cts. per lb.; 50-lb. lots, 62 cts. per lb.

McKim Patent All-Steel Measures Guaranteed U. S. Government Standard Capacity



	Each	Ppd.
1 qt.....	\$0 25	\$0 30
2 qts....	30	35
4 qts....	35	45
8 qts....	45	55
16 qts....	70	80
Per set (5 measures)	\$1.75;	postpaid
	\$1.95.	

Felins Bunch Tyer

Bunch Vegetables, Cut-Flowers, and Small Nursery Stock can be tied ten times quicker.

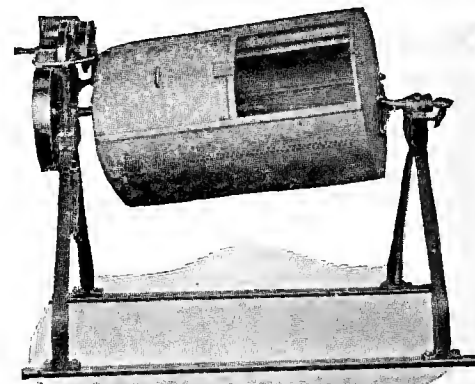


Foot Power

used in the shed or field.
Foot-power Model.....\$65 00
Electric Model.....150 00

Quicker bunching means quicker sales and greater profits. These machines prove their value to the market-gardener, florist, and nurseryman from the start. Old methods of tying—systems which required hand-operation and consumed the growers' costliest possession, time—can now be dispensed with. The foot-power model can be

Felins Electric Root Washer



A practical and durable Root Washer saves time; economical to operate and rinses as it washes. Slow motion of drum prevents damage to roots. Capacity of drum, 5 bushels. Will wash up to 60 bushels an hour. Has 1/4 H.P., 110-volt, AC motor. \$170.

Torrent Bunch Vegetable Washer



Clean
Vegetables
Bring
Better
Prices

The Torrent Bunch Vegetable Washer is a very practical device for washing bunch vegetables. Does the job thoroughly and quickly. Washes upward of 150 dozen bunches an hour. Has 1/4 H.P., 110-volt, AC motor. \$140.

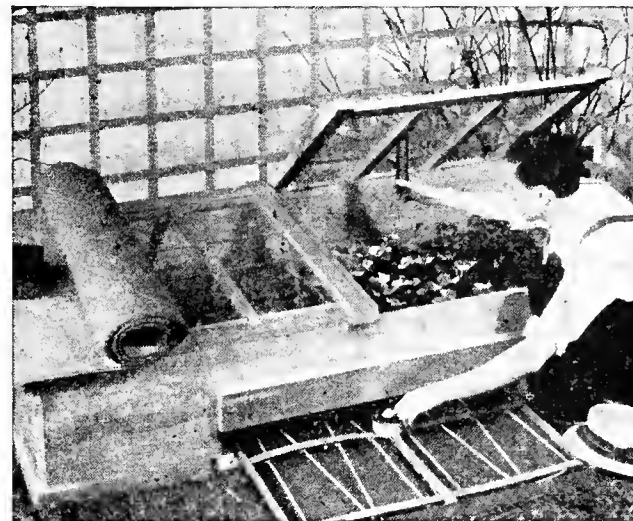
BOOKS

Practical Vegetable Culture. By Albert E. Wilkinson. 308 pages; 135 illustrations. \$2.

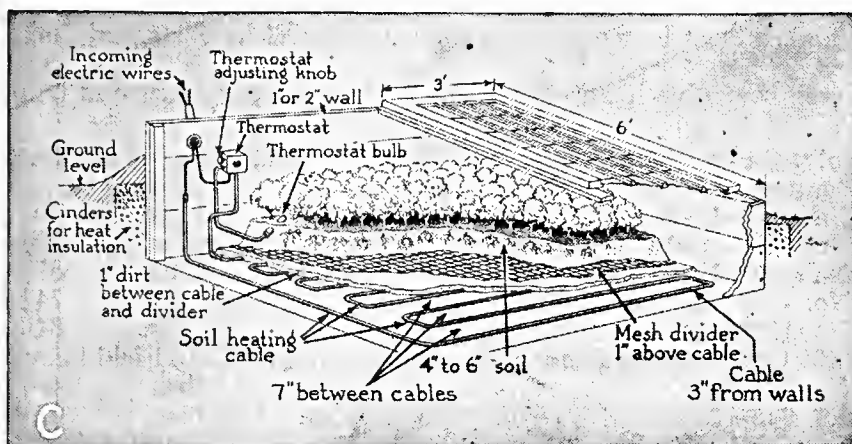
Plant Propagation. By Alfred C. Hottes. 238 pages; 136 illustrations. Cloth, \$2.

Westinghouse Automatic Hotbed Heater

Quicken plant-growth with controlled electric heat. Westinghouse Automatic Hotbed Heater provides the right amount of heat for indoor or outdoor beds of any size between 9 square feet and approximately 25 square feet. Its Built-in Watchman Thermostat automatically maintains any desired temperature between 50° F. and 100° F. To adjust heat, merely turn a handy knob located on the thermostat. Cost of operation is low, its consumption averaging 1 to 2½ kilowatt-hours per day. Its frame is rustproofed; moisture will not affect it. Heating elements are of special long-lived construction. Ask for Circular 1954-A; it describes the Heater in detail and tells how to build a hotbed. Heater is 32 inches square. Assembled complete with thermostat and 5-foot rubber-covered cord, for 110 volts. Price, \$9.95.



General Electric Automatic Soil Heating



More than 10,000 commercial florists and gardeners are now using this advanced method which gives them positive control of plant-growth and, as a result, more plants, better plants, and the greater profits which are naturally obtained by having the plants ready for the highest-priced markets.

In greenhouse benches, hotbeds, coldframes, etc., any temperature from freezing to 95° F. can be selected and maintained to produce desired plant-development. Beds can be installed whenever convenient and put into operation merely by closing a switch. The first and the operating cost are very low.

Equipment consists of special lead-covered heating cable and adjustable temperature-regulating thermostat. Standard unit cable lengths are of 60 feet on 115 volts, and 120 feet on 230 volts, for each 36 and 72 square feet of bed respectively. Large beds can be equipped by connecting necessary number of units in parallel with thermostat to control from one to six units. Ask for publication GEA-1644E. Cable (less than 240 feet), 7 cts. per ft. Longer lengths quoted on request. Thermostat, \$9.



Germaco Hotkaps

Germaco Hotkaps can make many extra dollars for you this season. They are patented wax-paper cones—"individual hothouses for each plant" that completely cover them, and *fully protect* them from frost, wind, rain, ground-crusting, and insects. This is your assurance of earlier, bigger crops, and higher, early-to-market

prices. Hotkaps are inexpensive and easy to use.

	Postpaid		Postpaid
25 Hotkaps...	\$0 50 \$0 60	500 Hotkaps...	\$5 85 \$6 10
100 Hotkaps...	1 75 1 85	1,000 Hotkaps...	10 25 10 60
100 Hotkaps*	2 65 2 80	5,000 Hotkaps...	50 75
250 Hotkaps*	3 85 4 05	10,000 Hotkaps...	100 00

*Garden Setter and Tamper included at price quoted

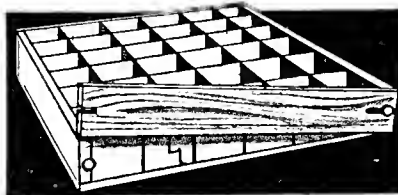
Garden Setter, made of light metal, 50 cts. each.

Steel Setter and Tamper, \$1.50 each.

Steel Tamper alone, 25 cts. each.

B-B Garden Flats

Made of choice lumber. Has patent detachable front which permits plants to be removed without disturbing the roots. Suitable for starting any kind of seeds indoors. Can be used either with or without pots. Size 12¾ x 18¾ x 3 inches. Holds 54 2-inch pots or 24 3-inch pots. Price (without pots) 55 cts. each; 25 or more, 50 cts. each.



B-B Waterproofed Plant-Boxes

An economical Plant-Box for those who desire to have earlier and better flowers and vegetables. When plants are ready to set outdoors, simply unlock bottom, fold flaps back, and place plants in ground without disturbing roots. Consists of Plant-Box made of heavy cardboard and 12 folding Cardboard Pots. 15 cts. each, 2 for 25 cts., \$1.35 per doz., postpaid.



Neponset Flower Pots



Neponset Flower Pots are universally used by home growers of flowers and vegetables, by truck-gardeners, by florists, by every grower of plants on a small or large scale. They are light, durable, and inexpensive. When used for transplanting they can be handled quickly and the construction permits removing easily if desired. They are ideal for rooting or shipping vegetable and flowering plants of any description. They are made from a tough, lasting, and water-proof paper and will not break in shipment or handling.

	25	Postpaid	100	Postpaid	1,000
2¼-in.....	\$0 25	\$0 35	\$0 50	\$0 65	\$3 60
3-in.....	30	40	75	90	4 50
4-in.....	35	45	1 00	1 25	7 25

Miller's No-Fold Dirt Bands

These Bands are used and recommended for transplanting purposes by experimental stations and large growers. They are time- and labor-savers. The plants need less watering, and when they are ready to set out, the Band can be planted with plant, preventing the disturbance of the roots. In using Bands you have stronger and healthier plants at the minimum cost. Especially adapted for early vegetable plants.

	250	Postpaid	500	Postpaid	1,000	Postpaid
2 x 2 x 2 in.....	\$0 60	\$0 70	\$0 90	\$1 05	\$1 50	\$1 70
3 x 3 x 3 in.....	1 00	1 15	1 65	1 85	3 00	3 30
4 x 4 x 3 in.....	1 35	1 50	2 50	2 70	4 50	4 80

Miller's Lock-Process Dirt Pots

Miller's Pots are made of high-grade water-finished board. Briefly, our Pots when locked stay locked; there is no occasion for the sides or bottoms of our Pots to become loose, and they contain no glue to loosen up or become sour.

	250	Postpaid	500	Postpaid	1,000	Postpaid
2 x 2 x 2 in.....	\$0 95	\$1 10	\$1 65	\$1 85	\$3 00	\$3 30
3 x 3 x 3 in.....	1 45	1 65	2 75	3 05	5 00	5 60
4 x 4 x 3½ in....	1 85	2 10	3 50	3 90	6 50	7 25

Square Deal Red Brand Farm Fence

Square Deal is not just another Fence. It has become the world's most widely used Fence because it is **galvanealed**—not merely galvanized. "Galvanealing" is an extra process, performed in great heat-treating ovens at 1250° Fahrenheit, an extra process, protected by 12 United States patents, that leaves more zinc on the wire and fuses, or amalgamates, it right into the wire. The zinc coating is not just "laid on" the wire. Galvanealing assures a thick, even coating that offers years longer protection against the elements and rust—and at no extra cost.

Red Brand Fence proved itself "definitely superior to any competing Fence" in a scientifically conducted weather-test of 45 different makes and sizes of Fence from all leading manufacturers and mail-order houses.

The Square Deal Knot

These Knots give the strongest grip with the least amount of wire. Crimps in the line and stay wires fit together within the Knot. This absolutely prevents slipping, but allows the flexibility necessary to fit hills and hollows without buckling.

Stiff one-piece stay wires used in Square Deal Fence perform the same duties as posts, only on a smaller scale.

Square Deal Fence has crimps in the line wires that give it an elastic tension and keep it tight and trim, regardless of temperature changes.

No. 12½ Gauge Field Fence. Top and bottom wires No. 10 gauge, filler wires No. 12½ gauge.

	Height	Bars	Stays	Weight	Per rod
No. 832- 6-12½.	32 in.	8	6 in.	7.1 lbs.	\$0 41
No. 939-12-12½.	39 in.	9	12 in.	6.3 lbs.	35
No. 1047-12-12½.	47 in.	10	12 in.	7.1 lbs.	39
No. 1155-12-12½.	55 in.	11	12 in.	7.9 lbs.	44

No. 11 Gauge Field Fence. Top and bottom wires No. 9 gauge, filler wires No. 11 gauge.

	Height	Bars	Stays	Weight	Per rod
No. 726-12-11.	26 in.	7	12 in.	7.0 lbs.	37
*No. 832- 6-11.	32 in.	8	6 in.	10.3 lbs.	56
*No. 832-12-11.	32 in.	8	12 in.	8.0 lbs.	42
*No. 939-12-11.	39 in.	9	12 in.	9.1 lbs.	47½
*No. 1047-12-11.	47 in.	10	12 in.	10.2 lbs.	53
*No. 1155-12-11.	55 in.	11	12 in.	11.4 lbs.	59½

No. 11 Gauge Sheep Fence. Same gauge wires as No. 11 Field Fence.

	Height	Bars	Stays	Weight	Per rod
*No. 635-12-11.	35 in.	6	12 in.	6.8 lbs.	35½
No. 845-12-11.	45 in.	8	12 in.	8.7 lbs.	45½

No. 9 Gauge Field Fence. All wires, including filler wires, No. 9 gauge.

	Height	Bars	Stays	Weight	Per rod
No. 726-12-9.	26 in.	7	12 in.	9.8 lbs.	\$0 49½
*No. 832- 6-9.	32 in.	8	6 in.	15.1 lbs.	79½
No. 832-12-9.	32 in.	8	12 in.	11.4 lbs.	57½
*No. 1047-12-9.	47 in.	10	12 in.	14.8 lbs.	74½
*No. 1155-12-9.	55 in.	11	12 in.	16.6 lbs.	84

No. 9 Gauge Sheep Fence. Same gauge wires as No. 9 Field Fence.

	Height	Bars	Stays	Weight	Per rod
*No. 635-12-9.	35 in.	6	12 in.	9.5 lbs.	47½
No. 845-12-9.	45 in.	8	12 in.	12.5 lbs.	62½

The No. 635 Sheep Fence is spaced 6, 6, 7, 8, and 8 inches between bars and the No. 845 Sheep Fence 4¾, 5½, 6, 7, 8 and 8 inches between bars.

*These are popular styles and carried in stock at Pittsburgh. Other styles shipped direct from mill, prepaid at prices quoted.

Complete catalogue on request.

All styles put up in 20-rod rolls.

10-rod rolls, 25 cts. per roll, extra.

STAPLES. 1- or 1¼-inch. 6 cts. per lb.

American Self-Fastening Angle Steel Fence Posts

These have been designed for general farm use where a light-weight post is desired. They are easy to handle, easy to drive, strong and serviceable, and are rolled from specially selected steel. Of sturdy angle shape, they will stand up and render years of satisfactory service. Self-fastening feature eliminates clamps and staples. The tongues are well formed and conveniently placed 2 inches apart. Fence wire or wire fabric can be fastened securely just where you want it. They are 1¼ x 1¼ x ¾ inches, painted a rich maroon color and equipped with patented slit-wing type of anchor.

	Weight each	Each	100 or more Each
5 ft.	6.20 lbs.	\$0 34	\$0 31
6 ft.	7.32 lbs.	39	36
6½ ft.	7.88 lbs.	41	38
7 ft.	8.44 lbs.	44	41
7½ ft.	9.00 lbs.	47	44
8 ft.	9.56 lbs.	50	47

Angle Steel End and Corner Posts

Made of 2½ x 2½ x ¼-inch angle with rounded corners. Designed to be set in concrete. End Posts have one brace; Corner Posts, two braces. They do not have the self-fastening feature.

	Each
End Posts. 7-foot; weight 52.5 lbs.	\$2 60
7-foot, 8-inch; weight 57.0 lbs.	2 85
Corner Posts. 7-foot; weight 84.0 lbs.	4 10
7-foot, 8-inch; weight 89.0 lbs.	4 35

Banner Steel Fence Posts

These Posts outlast three ordinary wood posts. No holes to dig—no setting—no tamping. Drive over 300 in a day.

Built like a railroad rail—the strongest form of fence-post construction known.

With their large split-wing patented anchor plates will root firmly into the ground as driven and hold the fence securely in line.

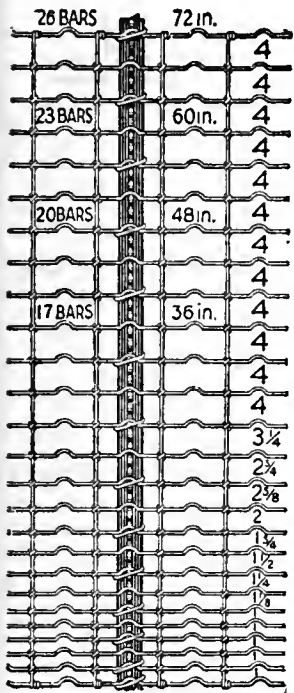
A continuous series of lugs are rolled along both sides of the face of the post and spaced every ¾ inch.

Banner Posts are finished with a heavy coat of a special steel paint, with unusually high preservative qualities, that is baked on under a high temperature.

Fence wire is fastened with special hump clamps which are easily attached. The clamps come formed to fit snugly around the post. Just place them in position and bend arm back over stem of post. An ordinary pair of pliers or a hammer will do the trick. Seven clamps furnished free with each post. No staples to buy.

	Weight each	Each	100 or more Each
5 ft.	7.32 lbs.	\$0 40	\$0 36
6 ft.	8.65 lbs.	47	43
6½ ft.	9.32 lbs.	50	46
7 ft.	9.98 lbs.	53	49
7½ ft.	10.65 lbs.	56	52
8 ft.	11.31 lbs.	60	56

SEE PAGE 86 FOR GALVANIZED POSTS



Square Deal Poultry and Garden Fence

Identified by the "Red Brand" marking with the top line painted red

This fencing will turn all poultry, including the smallest chicks; also keep out the small "varmints" that ravage the chicken-pens. The first five line wires at the bottom are only 1 inch apart.

Made by the patented "Galvanealed" process. The heavy-gauge wires assure many years of service.

The stiff picket-like stay wires are attached to the line wires with the famous Square Deal non-slip knot.

Square Deal Poultry Fence requires no top and bottom boards, and fewer line posts, to keep it erect and trim. Thus it costs, when erected, much less than poultry netting.

The top and bottom wires are No. 11 gauge with No. 14 1/2 gauge filler wires. Stay wires 6 inches apart.

PRICES PER 165-FOOT ROLL

No. 1736-6-14 1/2	36 in. high, 17 bars.....	\$5 50
No. 2048-6-14 1/2	48 in. high, 20 bars.....	6 85
No. 2360-6-14 1/2	60 in. high, 23 bars.....	7 85
No. 2672-6-14 1/2	72 in. high, 26 bars.....	9 25

Blue Ribbon Poultry Fence

Made by the patented "Galvanealed" process, Blue Ribbon Fencing will last several times as long as ordinary poultry netting. The spacing of the horizontal wires is the same as Square Deal Poultry Fence described above and it has the famous Square Deal knot. The top and bottom wires are No. 15 1/2 gauge and the filler wires are No. 17 gauge. The stay wires are spaced 4 inches apart.

PRICES PER 150-FOOT ROLL

No. 1736-4-17	36 in. high, 17 bars.....	\$4 55
No. 2048-4-17	48 in. high, 20 bars.....	5 35
No. 2360-4-17	60 in. high, 23 bars.....	6 30
No. 2672-4-17	72 in. high, 26 bars.....	7 20

Staples for the above, 8 cts. per lb.

Diamond Mesh Poultry Netting

Made from No. 20 gauge wire and galvanized after weaving
Put up in 50- and 150-foot rolls

Height	2-inch mesh		1-inch mesh	
	50 ft.	150 ft.	50 ft.	150 ft.
1 foot.....	\$0 60	\$1 50	\$1 00	\$2 75
1 1/2 feet.....		2 00		3 85
2 feet.....	95	2 50	1 85	5 00
2 1/2 feet.....		3 00		6 35
3 feet.....	1 30	3 50	2 65	7 45
4 feet.....	1 65	4 50	3 30	9 35
5 feet.....	2 00	5 50		
6 feet.....	2 35	6 50		

Straight Line Poultry Netting

Line wires run parallel. Made from No. 20 gauge wire and galvanized after weaving. Put up in 150-foot rolls only. Same price as Diamond Mesh Poultry Netting.

Wire Cloth

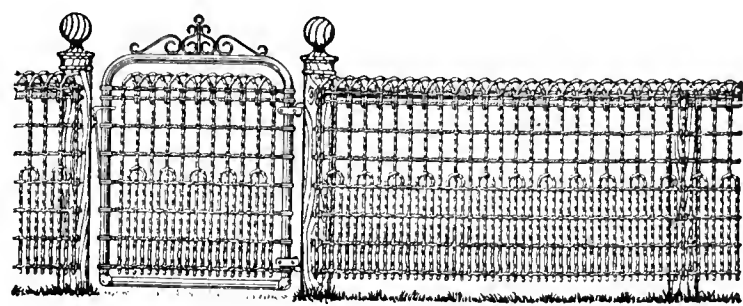
Also called Hardware Cloth. Used for a variety of purposes, including wire floors for poultry and chick pens. Made of copper-bearing wire galvanized after weaving.

1/2-in. mesh, No. 19 gauge, 36 in. wide

100 lineal ft.....	\$16 50	25 lineal ft.....	\$4 75
50 lineal ft.....	9 00	10 lineal ft.....	2 10

3/4-in. mesh, No. 14 gauge, 36 in. wide

100 lineal ft.....	\$32 50	25 lineal ft.....	\$8 75
50 lineal ft.....	17 00	10 lineal ft.....	3 70



Cyclone Lawn Fence

Makes beautiful home surroundings worth while

With Cyclone Fence enclosing your premises, you are more sure of success in your efforts to cultivate beautiful surroundings for your home. Flowers, lawns, gardens, trees, and shrubs have protection at all times against destructive outsiders. Cyclone Fence is woven in beautiful, symmetrical designs that are attractive and artistic, yet unobtrusive.

STYLE "F." The most popular ornamental fence for front yards, back yards or division fence. Pickets are of No. 9 heavy galvanized wire spaced 3 inches apart at top, 1 3/8 inches apart at the bottom. Cables spaced 6 inches apart, except the two top cables, which are spaced 2 3/8 inches apart. Illustration shows Style "F" Fencing and Cyclone Galvanized Walk Gate.

STYLE "L-EXTRA." A high-grade, moderately priced Fence. Specially adapted for back yards and division fencing. Pickets of No. 9 heavily galvanized wire are spaced 3 inches apart. Cables are of heavily galvanized wire spaced 6 inches apart, except the two top cables, which are spaced 2 3/8 inches apart.

PRICES PER 150-FOOT ROLL

Style "F." 36 in. high; per roll.....	\$19 25
Style "F." 42 in. high; per roll.....	21 50
Style "F." 48 in. high; per roll.....	24 50
Style "L-Extra." 36 in. high; per roll.....	14 00
Style "L-Extra." 42 in. high; per roll.....	15 85
Style "L-Extra." 48 in. high; per roll.....	17 65

PRICES IN CUT LENGTHS

Style "F" 42 in. will be furnished in any desired length under 150 feet at 18 cts. per lineal foot. Style "L-Extra" 42 in. at 13 cts. per lineal foot.

Both styles of Cyclone Lawn Fence furnished either in woven or electric welded fabric.

Cyclone Galvanized Walk Gates

A handsome and practical Gate for all home purposes. The frame is heavy tubular steel, 1 1/8-inch diameter, galvanized, and covered with Style "F" Fabric. Gates are made for 3-foot openings, which means distance between posts with proper allowance for hinges and latch. Prices: 36 in. high, \$3.55; 42 in. high, \$3.70; 48 in. high, \$3.85. Prices include fixtures for wood posts. Fixtures for tubular steel posts, \$1 extra. If steel-post fixtures are wanted, give outside diameter of posts.

Cyclone Flower-Bed Border

Extensively used for paths and walks. Easily installed and will conform to any size or shape of flower-bed.

Is ordinarily used without supports but can be erected on any wood or steel support. Height 22 inches. 150-foot roll \$10.75; cut lengths, 9 cts. per lineal foot.

Cyclone "L-Extra" Trellis

A very durable and artistic support for climbing vines and flowers; harmonizes with home surroundings. Made of corrugated No. 11 galvanized wire, spaced 4 inches apart; cables are of No. 13 galvanized wire.

PRICES

	150-foot rolls per roll	Cut lengths per lineal foot
18-inch width.....	\$11 25	\$0 09 1/2
24-inch width.....	13 00	11
30-inch width.....	14 50	12

American Galvanized Steel Fence Posts

"The Post Without a Fault"

The American Galvanized Post surpasses all others in Strength—Durability—Economy.

The cylindrical shape gives greater resistance at the ground line and makes it easier to drive the post. The Line Posts are a straight cylinder $1\frac{3}{4}$ inches in diameter made of $14\frac{1}{2}$ gauge metal. Tongues are placed $1\frac{1}{2}$ inches apart and may be bent up or down to hold fence wire. Posts are galvanized after being formed and punched, all parts being protected by galvanizing. Line Posts, when driven, open automatically, providing self-anchorage.

Twenty-five years of actual service is convincing proof of the lasting quality of the American Post. Nothing adds more to the appearance of a farm than fence stretched on neat, uniform, and slightly steel posts.

For woven-wire fence, barb wire, and plain wire.

Galvanized Line Posts

	Each
6-foot; weight 8.4 lbs.....	\$0 63
6 $\frac{1}{2}$ -foot; weight 9.1 lbs.....	69
7-foot; weight 9.8 lbs.....	74
7 $\frac{1}{2}$ -foot; weight 10.5 lbs.....	79
8-foot; weight 11.2 lbs.....	84

Galvanized End and Corner Posts

Made of No. 13 $\frac{1}{2}$ gauge steel galvanized after forming. Top and bottom diameter $1\frac{3}{4}$ inches. The end or gate post has one brace, the corner post has two braces. Shipped complete with all fittings. Designed to be set in concrete.

	Each
End or Gate Posts. 6-foot; weight 19 lbs.....	\$1 75
7-foot; weight 22.5 lbs.....	2 00
8-foot; weight 25.7 lbs.....	2 25
Corner Posts. 6-foot; weight 28.8 lbs.....	2 50
7-foot; weight 33.7 lbs.....	2 85
8-foot; weight 38.5 lbs.....	3 20

Extras

	Each
Ornamental Tops. For Line Posts.....	\$0 20
For End and Corner Posts	40
Driving Caps. For Line Posts.....	40

Royal Blue Wire Stretcher



The Royal Blue Wire Stretcher and Hoist has no equal of its kind in simplicity, etc. It is a first-class roller-bearing Stretcher having large sheaves, each revolving on ten hardened steel bearings. Made entirely of best grade of steel and malleable iron. Reeved with best quality of $\frac{3}{8}$ -inch rope, 16 feet to each Stretcher. Wire grasps are positive and hold the wire firmly. The new swiveling features at top and bottom are a great convenience when using as a hoist or handling "twisty wire." Can be used as a hoist up to 1,000 pounds capacity. \$2, postage 20 cts. extra.



National Single Wire Stretcher

Made of malleable iron. Grips firmly and easily hooks over any style of steel or wood post. It is just what you want for stretching barbed and plain wire. \$1, postage 15 cts. extra.

Special Barb Wire

Our Special Barb Wire is made of No. 14 galvanized, strong steel wire, and has a breaking strength of 1,000 pounds. The barbs are short and humane.

80-rod spool

Two-Point Cattle. Barbs about 5 inches apart.....\$2 45
Two-Point Hog. Barbs about 3 inches apart..... 2 60

Regular Barb Wire

Made from No. 12 galvanized wire. We can furnish in different styles as follows:

80-rod spool

Two-Point Cattle. Barbs about 5 inches apart.....\$3 30
Two-Point Hog. Barbs about 3 inches apart..... 3 50
Four-Point Cattle. Barbs about 5 inches apart..... 3 50
Four-Point Hog. Barbs about 3 inches apart..... 3 80

If preferred we can furnish above in even weight 100-pound spools at \$4.15 per 100 pounds.

Galvanized Plain Wire

100-lb. coil

No. 9. 1705 feet in 100-lb. coil. 10-lb. coil 65 cts.....\$4 30
No. 10. 2057 feet in 100-lb. coil..... 4 35
No. 11. 2582 feet in 100-lb. coil..... 4 40
No. 12. 3369 feet in 100-lb. coil. 10-lb. coil 65 cts..... 4 50

Galvanized Coil Spring Wire

No. 9. 1705 feet in 100-lb. coil. Price per 100 lbs. \$4.40.

Special prices will be quoted on any of the above Wire in ton or half-ton lots

Fence Staples

Galvanized. 1 or $1\frac{1}{4}$ -inch. Lb. 6 cts., 100-lb. keg \$4.45.

Polished. 1 or $1\frac{1}{4}$ -inch. 100-lb. keg \$4.20.

Wire Nails

100-lb. keg

20d Common Nails.....\$3 65
10d Common Nails..... 3 80
9d Common Nails..... 3 85
8d Common Nails..... 3 90

Prices on other sizes quoted on request. Prices subject to change without notice.

The Townsend Wire Stretcher



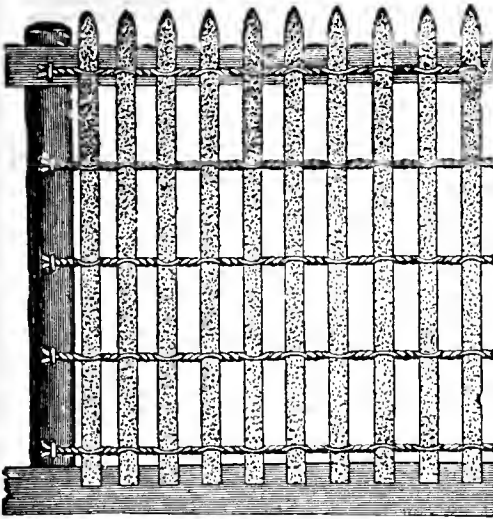
This is made with a wooden lever or handle 3 feet in length, to which is attached malleable iron pinchers, into which are riveted serrated steel grips; warranted not to slip. It is a substantial and very durable implement. It stretches large-meshed woven wire much better than most of the Stretchers which are made especially for this purpose, and it works equally well on plain, twisted, and barbed wire. For use on wood posts, \$2; for use on steel posts, \$2.10.



Champion Ash Sifter

Inexpensive and ideal for sifting ashes under any size furnace grate. Draft removes all dust—keeps basement clean—saves coal. Scoop $8\frac{1}{2}$ x 14 inches; all wire construction; 36-inch handle. \$1, postage 20 cts. extra.

Combination Picket Fence



This popular Fence, for gardens, yards, vacant lots, etc., is made of hard-wood pickets 1½ inches wide, ½ inch thick, and 4 feet long, woven together, 2 inches apart, with five cables of No. 12 heavy galvanized wire, pointed at top. Painted with a red mineral preservative, applied boiling hot which makes a very durable finish. Top rail and bottom board not necessary. Can also be used as a snow fence or for temporary corn-cribs. Easily put up and taken down.

100-foot roll, 4 ft. high.....\$13 50
50-foot roll, 4 ft. high..... 7 25
Cut lengths 16 cts. per ft.

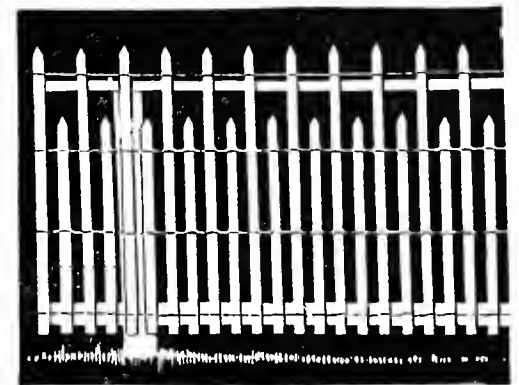
Staggered-Top Lawn and Garden Picket Fencing

PROTECTION

BEAUTY

ECONOMY

The staggered tops, the Gothic pointed pickets, and rich snow-white finish of this Fence combine to give unusual charm and beauty. Its closely spaced pickets shut out effectively even small intruders. The longer pickets are 4 feet in length, and the intermediate pickets are 3 feet long, woven together with four cables of heavily galvanized wire. Pickets are ½ x 1½ inches, surfaced 2 sides, and spaced 2 inches apart. 50-foot roll, \$9.65.



American Poultry-Yard Gates

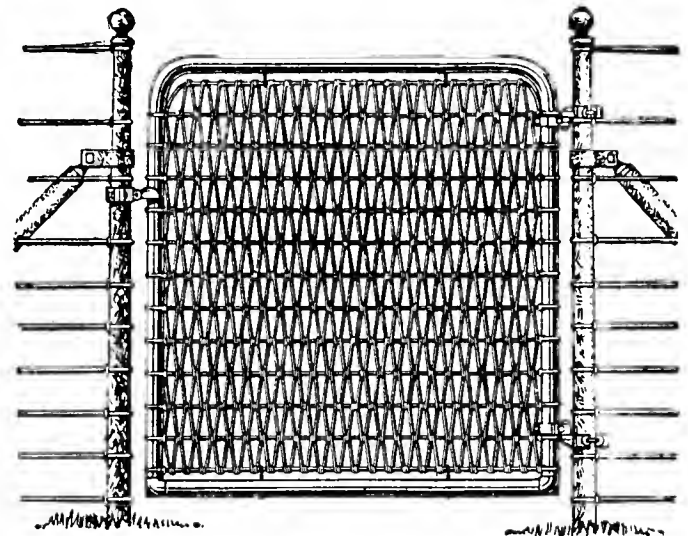
American Steel Gates, always efficient and well designed, have been improved both in structure, finish and operation. The tubular steel frames combine great strength, durability, and beauty. Gates and fittings are thoroughly galvanized.

American frames are covered or filled with a 2-inch mesh fabric of truss form, which not only proves a barrier to the smallest animals while lending bridge-like rigidity and strength, but also makes the Gates unclimbable. The combination of the frame and the truss filling produces the highest type of fence, Gate answering every requirement of good engineering practice.

PRICES

Each

For 3-foot opening, 42 inches high; weight 17 lbs.....\$3 50
For 3-foot opening, 50 inches high; weight 19 lbs..... 3 80
For 3-foot opening, 58 inches high; weight 21 lbs..... 4 15
Above prices include fixtures for wood posts. For fixtures for steel posts, add 50c.



American Single Drive Gates

With galvanized tubular steel frame, filled with a 2-in. diamond mesh galvanized fabric which is unclimbable

A strong, non-climbable, and economical farm Gate. Universally recognized for its simplicity and durability. In addition to upright tubular brace the frame is supported by a diagonal brace rod which keeps it firm and prevents sagging.

PRICES

Each

For 10-ft. opening, 42 in. high; weight 54 lbs...\$9 30
For 10-ft. opening, 50 in. high; weight 59 lbs...10 00
For 10-ft. opening, 58 in. high; weight 64 lbs...10 75
For 12-ft. opening, 42 in. high; weight 62 lbs...10 45
For 12-ft. opening, 50 in. high; weight 68 lbs...11 30
For 12-ft. opening, 58 in. high; weight 73 lbs...12 00

Above prices include fixtures for wood posts. For fixtures for steel posts, add 75 cts. F.O.B. factory if not in stock.

"Can't Sag" Gates

"Can't Sag" Gates are neither all wood nor all steel but a happy combination of the two. They retain all good features of wood Gates and the advantages of steel Gates, but have none of the drawbacks of either. They last longer than any other Gate you can build or buy. They weigh only half as much as ordinary all-wood Gates and are stronger than most steel, wire, or gas pipe Gates. They "Can't Sag" even a quarter of an inch. Made of "C" finish, long-leaf pine and painted a rich orange color. The neatest, trimmest-looking Gates ever put up. Made of five 6-inch boards, 52 inches high. 10 ft. long \$8.85, 12 ft. \$10.25, 14 ft. \$11, 16 ft. \$11.90.



"Can't Sag" Gate Steels

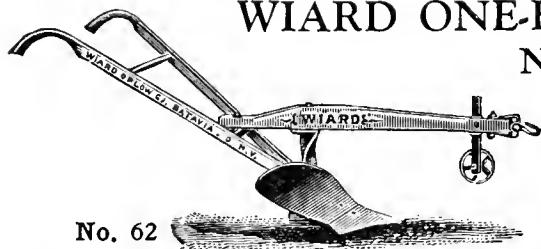
Consists of 4 pairs of Angle Steel Uprights, Double Truss Braces, Hook Lag Screws, Hinges, Bolts, Washers, directions, etc., to build the Gate as shown above—everything except the boards. Price of set complete, \$4.75.

Agricultural Implements

WIARD PLOWS

WIARD ONE-HORSE PLOWS

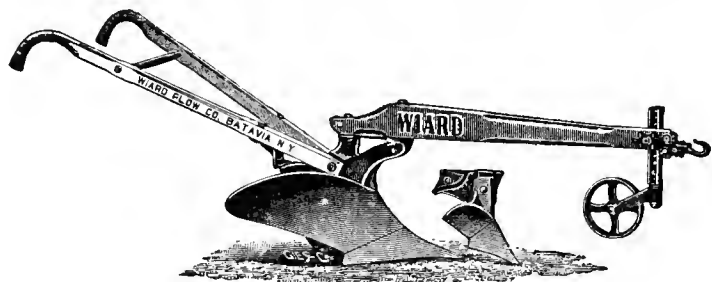
No. 62. Right-Hand



No. 62

The smallest Wood Beam Wiard Plow. Capacity, 3 to 5 inches deep, 6 to 8 inches wide. Weight, 40 pounds. Plain, \$9.10; wheel, \$1.65 extra.

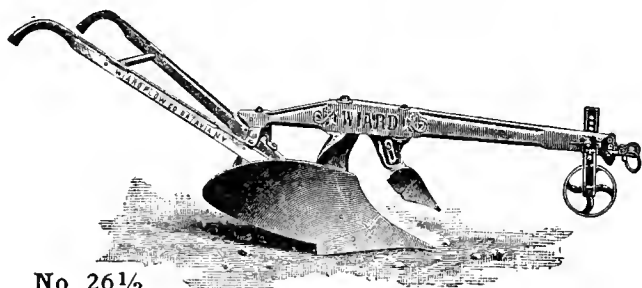
No. 13. Right-Hand. A medium-sized one-horse Plow adapted to all soils. (Not illustrated.) Capacity, 4 to 6 inches deep, 6 to 9 inches wide. Weight, 52 pounds. Plain, \$10.50; wheel, \$1.65 extra.



No. 10C. Right-Hand

Has adjustable beam so that the horse can walk in the furrow or on the land. Capacity, 4 to 7 inches deep, 6 to 11 inches wide. Weight, 77 pounds. Plain, \$15.10; wheel, \$1.65 extra; jointer \$3.60 extra.

WIARD TWO-HORSE PLOWS



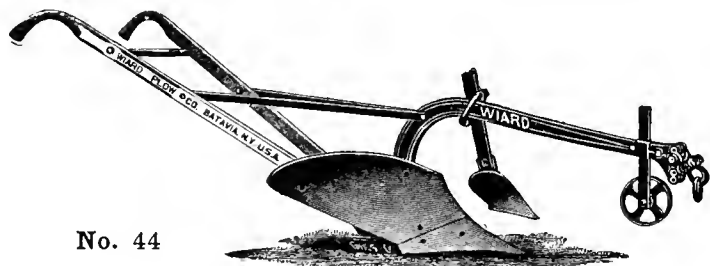
No. 26 1/2

Wood-Beam Plows

No. 27. Left-Hand. Capacity, 6 to 8 inches deep, 10 to 14 inches wide. Weight, 105 pounds. Plain, \$22; wheel, \$1.65 extra; jointer, \$4.40 extra; steel moldboard, \$1.65 extra.

No. 28. Left-Hand. Capacity, 7 to 9 inches deep, 12 to 16 inches wide. Weight, 112 pounds. Add \$1.10 to prices of No. 27.

No. 26 1/2. Right-Hand. Capacity, 5 to 8 inches deep, 10 to 14 inches wide. Weight, 115 pounds. Plain, \$22; wheel, \$1.65 extra; jointer, \$4.40 extra; steel moldboard, \$1.65 extra.



No. 44

Steel-Beam Plows

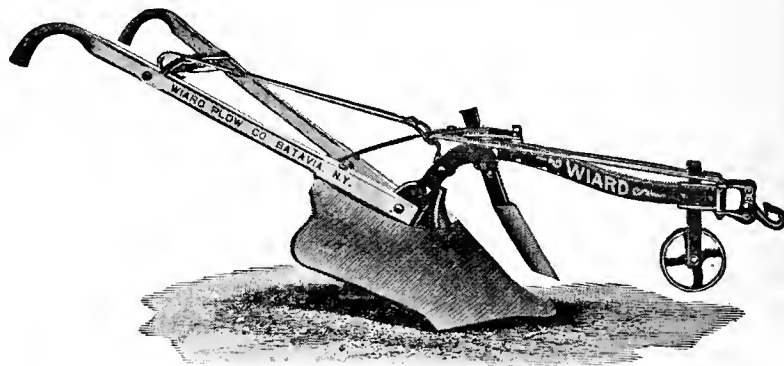
No. 103. Left-Hand. Two-horse. Capacity, 4 to 7 inches deep, 9 to 13 inches wide. Weight, 120 pounds. Plain, \$20.90; wheel, \$1.65 extra; jointer, \$4.40 extra; steel moldboard, \$1.65 extra.

No. 104. Left-Hand. Two- or three-horse. Capacity, 5 to 8 inches deep, 11 to 15 inches wide. Weight, 130 pounds. Plain, \$23.10; wheel, \$1.65 extra; jointer, \$4.40 extra; steel moldboard, \$1.65 extra.

No. 43. Right-Hand. Same capacity, size, and price as No. 103.

No. 44. Right-Hand. Same capacity, size, and price as No. 104.

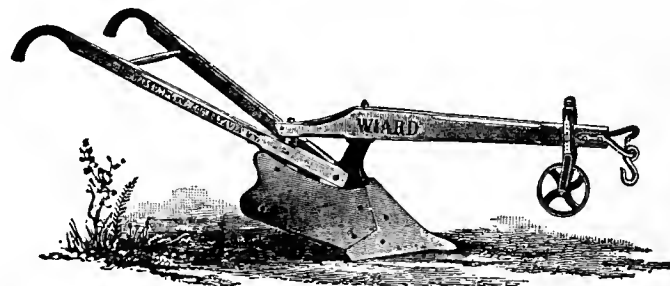
WIARD STEEL-BEAM SWIVEL PLOWS



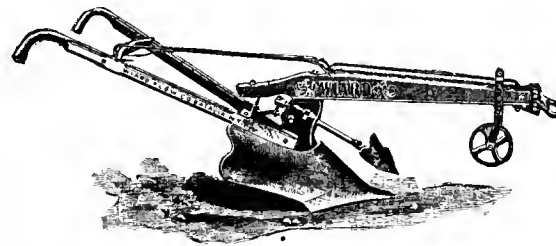
No. 120. Two-Horse. Capacity, 5 to 8 inches deep, 10 to 13 inches wide. Weight, 118 pounds. Plain, \$22.85; adjustable clevis, \$1.45 extra; wheel, \$1.65 extra; jointer, \$4.40 extra; colter, \$3.85 extra; steel moldboard, \$1.65 extra.

No. 126. Two-Horse. Capacity, 5 to 8 inches deep, 12 to 15 inches wide. Weight, 139 pounds. Add 55 cts. to prices of No. 120.

WIARD WOOD-BEAM SWIVEL PLOWS



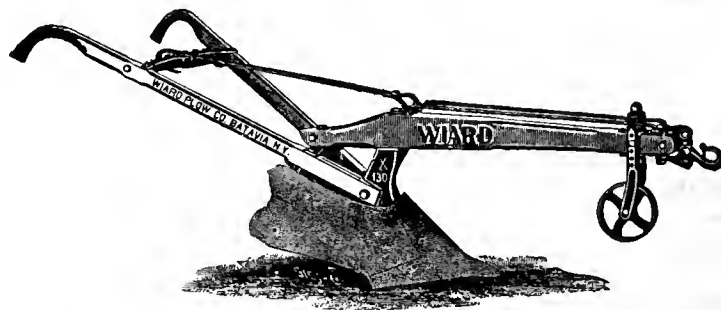
No. 21. One-Horse. Capacity, 4 to 7 inches deep, 6 to 10 inches wide. Weight, 77 pounds. Plain, \$14.30; wheel, \$1.65 extra; steel moldboard, \$1.45 extra.



No. 140. Two-Horse Swivel Plow

The cut shows Plow with adjustable clevis and jointer. Capacity, 5 to 8 inches deep, 10 to 13 inches wide.

Weight, 115 pounds. Plain, \$21.50; adjustable clevis, \$1.45 extra; wheel, \$1.65 extra; jointer, \$4.40 extra; colter, \$3.85 extra; steel moldboard, \$1.65 extra.



No. 130X. Two-Horse Swivel Plow

Capacity, 5 to 8 inches deep, 10 to 13 inches wide. Weight, 104 pounds. Plain, \$19.80; adjustable clevis, \$1.45 extra; wheel, \$1.65 extra; steel moldboard, \$1.65 extra.

Wiard Plows have been manufactured continuously since 1804. They are strongly constructed and are recognized as leaders in this class of agricultural implements.

OLIVER CHILLED PLOWS

The Oliver Chilled Plows need no introduction to the Pennsylvania farmer. We have space to show but a few of the leading favorites among Pennsylvania farmers, but will send a complete catalogue on request. A full line of genuine Oliver repairs always in stock.

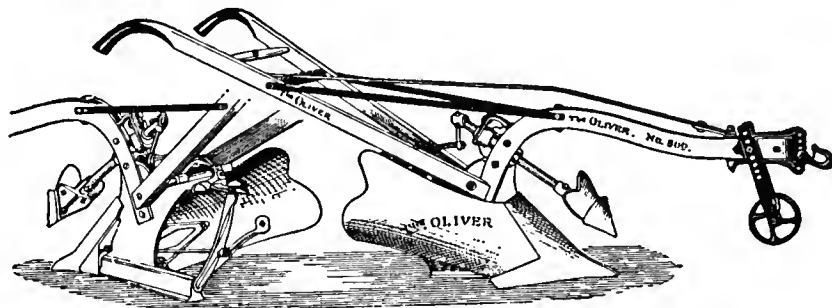
No. 40N Wood-Beam, Full Chilled, Right- and Left-Hand



This is the veteran Plow of the Oliver line and for many years it has been familiar to a majority of the farmers in America. Its great capacity, steady running and turning qualities, make it valuable in sandy or alluvial lands, and on farms containing a variety of soils. It will turn a furrow 9 x 16 inches. Weight of Wood-Beam, 138 lbs.; Steel-Beam, 157 lbs.

Price, Wood- or Steel-Beam, Plain, \$23.10. For Wood-Beam, Wheel extra \$2.40; Jointer extra \$3.75. For Steel-Beam, Wheel extra \$2.25; Jointer extra \$4.75.

Oliver No. 513 Hillside, Steel-Beam Plow



This Plow has a distinctive design to the moldboard. It is recommended for conditions where scouring is difficult—the moldboard being short and with sufficient curvature to effectively turn the soil. It is well adapted for plowing sod as well as stubble. Chilled bottoms, trussed steel beam, strong wood handles make this a very serviceable Plow. Bottoms are long, insuring steadiness and ease of handling. Capacity, 8 x 15 inches. Weight, 160 lbs. Price, Plain, \$24; Wheel extra \$1.65; Jointer extra \$3.30.

Prices of other Oliver Chilled Plows

No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra
BN.	Wood	Right	5 x 10	71	\$13 40	\$1 65	\$3 30
10N.	Wood	Right	5½ x 11	74	15 50	1 65	3 30
E1N.	Wood	Right or Left	7 x 14	132	23 85	2 40	3 75
83N.	Steel	Right or Left	7 x 14	146	21 50	2 25	4 75

No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra
84.	Steel	Right or Left	8 x 16	158	\$23 50	\$2 25	\$4 75
153.	Trussed Steel	Hillside	5 x 8	70	15 40	1 65	
512.	Trussed Steel	Hillside	8 x 13	139	23 50	1 65	3 30

SPECIAL CIRCULARS OF ANY OF ABOVE PLOWS MAILED ON REQUEST

Vulcan Chilled Plows

The Vulcan Chilled Plow has been manufactured for more than a half century and is considered by many users as the best Chilled Plow manufactured. They are equipped with ribbed moldboards, which act as strengthening braces, and corrugated points, which it is claimed will outwear ordinary points and also hold a cutting edge a greater length of time.

No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra
No. 10.	Wood	Right	6 x 11	83	\$17 25	\$1 65	
No. 13.	Wood	Right or Left	8 x 13	127	21 85	1 65	\$4 70
No. 14.	Wood	Right or Left	8 x 14	135	22 50	1 65	4 70
No. 13.	Steel	Right or Left	8 x 13	145	21 85	1 65	5 25

No.	Beam	Hand	Capacity inches	Weight lbs.	Plain	Wheel Extra	Jointer Extra
No. 14.	Steel	Right or Left	8 x 14	155	\$22 80	\$1 65	\$5 25
No. 10.	Steel	Hillside	7 x 10	112	19 40	1 65	5 75
No. 12.	Steel	Hillside	8 x 12	143	25 25	1 65	5 75

Wiard Road or Contractor's Plows



No. 64. A light Plow intended for road-repair work. It has excellent turning qualities and will hang to the ground on a hard and difficult job. Weight, 160 pounds. Price, with steel beam, shoe and forged steel point, \$44.55.

No. 65. A medium-weight Plow intended for general contracting work. Weight, 200 pounds. Price, with cast-iron beam, cast-iron point, \$35.20; with forged steel point, \$40.70. No. 65, with steel beam and forged steel point, \$56.40.

No. 69. Intended for use with either animal power, tractor, or road-roller. For all road or contractors' work—for tearing up cobble-stones and macadam—it can be used as a rooter Plow by simply removing the steel wing below the moldboard—thus making a two-in-one Plow for all-round work. Weight, 315 lbs. Price, with steel beam, and forged steel point, \$73.70. (Shoe for end of beam included at prices quoted on all Plows.)

Wiard No. 32 Tractor Plow

TWO BOTTOM OR SINGLE BOTTOM

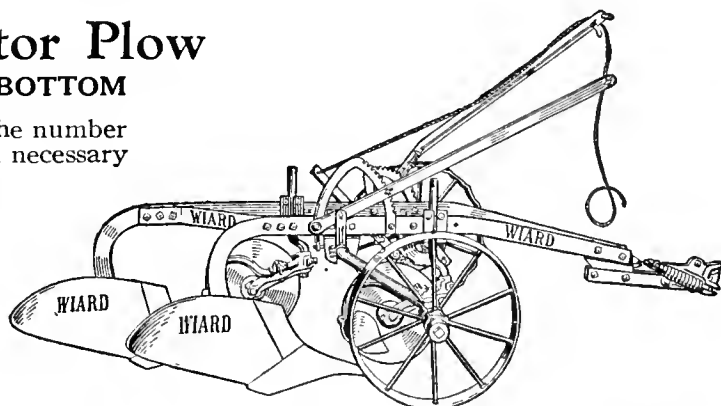
This Plow is constructed with an idea to simplicity, efficiency, and strength. The number of parts has been reduced to a minimum, knowing that with few parts making all necessary adjustments a standard of desirability in Plow construction has been attained. Ease of draft, smoothness of furrow, and durability of Plow are unexcelled. There is a good easy turn to the moldboard but it puts the furrow over, covering all vegetation, manure, or trash of any kind.

The Plow is equipped with safety-spring trip-hitch, assuring safety to Plow, Tractor, and operator. Operating levers are easily reached from the Tractor seat and adjustment made without difficulty with one hand while plowing. Weight of two-bottom Plows, 650 lbs.; weight of single bottom Plow, 485 lbs.

PRICES

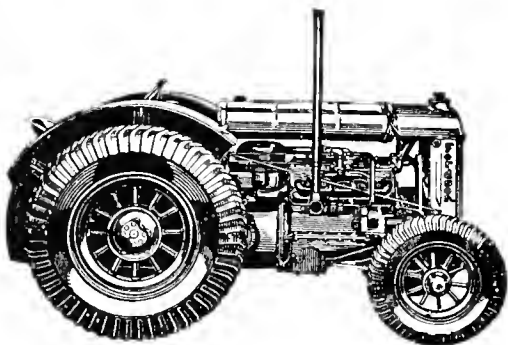
Two Bottom; capacity, 24 to 28 inches wide, 5 to 9 inches deep
With chilled bottoms, combined rolling colters and jointers. \$107 80
For steel moldboards instead of chilled, add. 3 30
For jointers instead of combined rolling colters and jointers, deduct. 8 80

Single Bottom; capacity, 16 to 18 inches wide, 6 to 10 inches deep
With chilled bottom, combined rolling colter and jointer. \$91 60
For steel moldboards instead of chilled, add. 1 65
For jointer instead of combined rolling colter and jointer, deduct. 4 40



The Fordson Tractor

Fordson's Rugged Construction Proved by Many Years of Use



Standard Fordson equipped with low-pressure agricultural tires

Descriptive Circular and Prices on Request

Standard Model Fordson

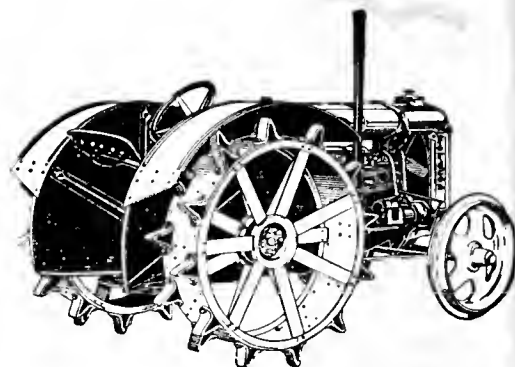
The New Fordson Agricultural Tractor of today gives the farmer a Tractor with ample power to haul two 14-inch bottom plows, with 30 brake horse power for belt work.

The New Fordson is easily started, being equipped with the latest type high-tension magneto with impulse starter.

An improved lubrication system with a larger crank-case and oil-filter screen, new water-cooling system with pump, and new 12-plate transmission brake.

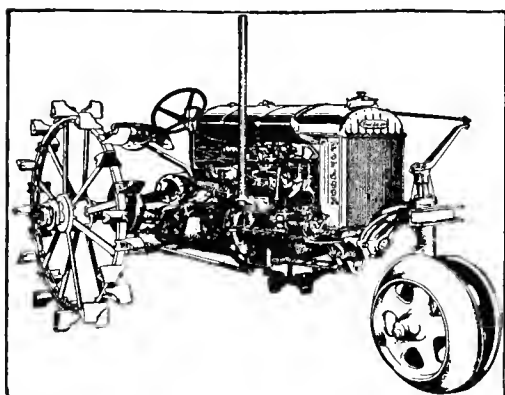
Heavy fenders and platform are standard equipment. Choice of three fuel carburetors—gasoline, kerosene, or fuel-oil. Has latest centrifugal type of governor and improved design of steering providing easier operation.

The New Fordson is a powerful, compact, sturdily built Tractor, with the framework of single-unit construction, and all working mechanism enclosed. It will give dependable, economical farm transportation and farm power.



Standard Fordson equipped with spade lugs

We carry Repair Parts for all models Fordson Tractors in stock



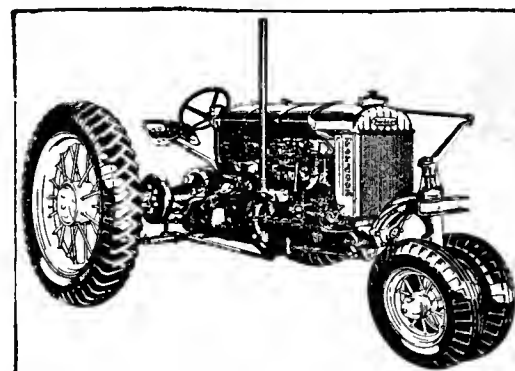
All-Around Fordson equipped with spade lugs

All-Around Model Fordson

Fundamentally, the All-Around Fordson is the same as the Standard Fordson that has been proved by actual farmwork. There are no radical changes in its vital parts. Same engine, same type transmission, same differential. Same rugged, economical Tractor.

The changes have to do entirely with increasing its versatility and its usefulness. It is now a high-clearance Tractor built to handle row-crop implements and do all the other Tractor jobs just as efficiently as before.

The All-Around Fordson is equipped with independent brakes to facilitate turning. Rear wheels can be quickly adjusted to the right width for different row crops. Choice of either steel wheels with spade lugs or low-pressure farm tires.



All-Around Fordson equipped with low-pressure agricultural tires

The Ferguson Wheel-less Plow

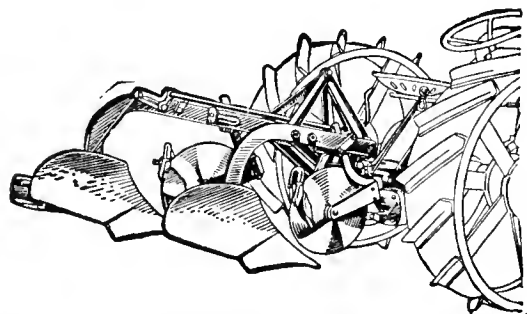
Adaptable to all plowing conditions

The Ferguson, when attached to the Fordson or certain other tractors, becomes part of the tractor—a single integral unit. Because of this unit principle, and because of the revolutionary line of draft it secures penetration by pull instead of weight.

The Ferguson handles easily in small and irregularly shaped fields, and plows corners and tight places as well as the wide-open spaces. Quickly attached or detached, and is easily raised or lowered, with one hand, from the driver's seat. Made in three sizes:

16-inch Single Bottom, with Fordson Hitch. Weight 265 lbs.....	\$102 00
12-inch Two Bottom, with Fordson Hitch. Weight 360 lbs.....	110 00
14-inch Two Bottom, with Fordson Hitch. Weight 360 lbs.....	116 00

Above prices include combination rolling colters and jointers. Descriptive circular on request



Holland Hillside or Offset Hitches

Used wherever an Offset Hitch is needed. Saves time plowing hillside and helps turn the furrows over completely.

No. 200. Operates by hand-lever. For Fordson Tractor \$6.60; for McCormick-Deering Tractor \$7.10.

No. 50. Operates by hand-wheel. For Fordson Tractor \$8.50.
Circular on request

Space does not permit a listing of the following lines in this catalogue. Special catalogue and prices will be sent on request.

Ann Arbor Hay-Presses
Farquhar Threshers and Saw Mills
Rosenthal Corn-Huskers and Shredders
Martin Corn-Cribs

Regardless of what you want in the line of Farm Machinery, consult us before buying

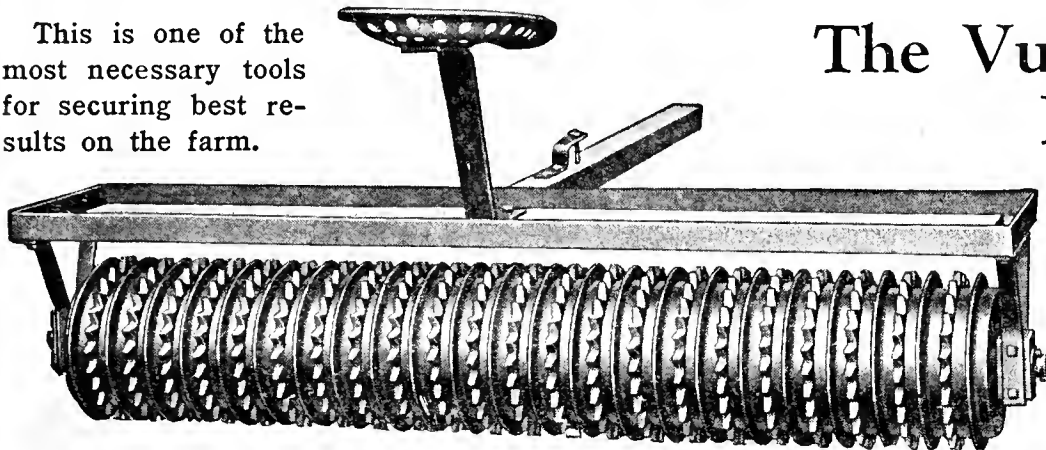


For New Equipment
or Changeovers—
Ask us

GOODYEAR Farm Implement Tires

Cover the ground faster, save on fuel, repairs, wear and tear, travel quickly from job to job—provide comfortable riding instead of hard jars, enable you to work in clear air instead of dust-clouds.

This is one of the most necessary tools for securing best results on the farm.



The Vulcan Disc and Sprocket Roller Pulverizer

To grow crops successfully, it is necessary to retain moisture in the ground; to accomplish this the top soil must be kept from crusting, and this can be done thoroughly and easily by using a Vulcan Sprocket Pulverizer.

The sprocket or spike-rings break the clods, and together with the solid discs, pulverize and pack the soil and prevent rapid evaporation.

For planting corn, this machine will prepare a better seed-bed than can be completed in any other way.

It levels and pulverizes the soil and leaves the top packed firmly with fine mulch in perfect condition for receiving the seed. Also, in preparing a seed-bed for alfalfa or other grain, it cannot be surpassed, and it is exactly suited for breaking the crust which forms on winter wheat. For rolling corn, we supply spacing collars so that some discs can be removed and the remainder held at the proper width.

End brackets are in one piece, giving rigid connection. End bearings are made of maple, soaked in oil, and are reversible. Strongly constructed throughout and will give you long and satisfactory service.

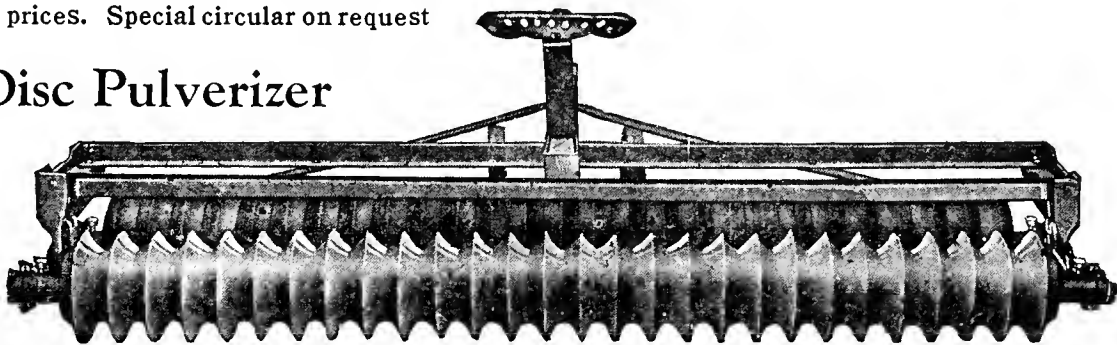
8-ft., Single Section. Weighs 925 lbs.....	\$69 50	11-ft., Three-Section. Weighs 1,388 lbs.....	\$105 00
9-ft., Single Section. Weighs 1,028 lbs.....	79 50	15-ft., Three-Section. Weighs 1,880 lbs.....	136 00
10-ft., Single Section. Weighs 1,328 lbs.....	90 00	Doubletrees and Neckyoke, extra.....	3 50

Furnished with long pole or tractor hitch at above prices. Special circular on request

Buch's Double Gang Disc Pulverizer

This tool has two gangs of iron discs which crush and cut lumps, pack out all air-spaces, and level the surface of the field, all in one operation.

The discs of the back gang come between those of the front gang so that no lumps are missed. This Pulverizer, with a harrow for bringing up the lumps to the top, will make a perfect seed-bed in any soil. The discs of the front gang build up a set of ridges and the back gang, coming half way between, splits and works these ridges over, thus stirring the soil.



No.	Length	Rolling Width	Diam. Front Disc	Diam. Rear Disc	No. Sections	Weight	Price
No. 626.	7 ft.	74 in.	15 in.	12 in.	37	900 lbs.....	\$71 50
No. 627.	8 ft.	84 in.	15 in.	12 in.	43	1,000 lbs.....	75 50
No. 628.	9 ft.	98 in.	15 in.	12 in.	49	1,100 lbs.....	88 50
No. 630.	11 ft.	122 in.	15 in.	12 in.	61	1,350 lbs.....	107 50

Furnished with long pole for horses or tractor hitch. If both long pole and tractor hitch are wanted, add \$3 to above prices. Doubletrees and Neckyoke, extra \$2.50.

Pittsburgh Steel Land Roller

Drums or rolls are made of heavy, 12-gauge high carbon steel, with pressed steel ends, and will not dent.

Axles are 1 5/8 inches in diameter; angle frame of high carbon steel, 3 x 3 x 5/16 inches.

Hangers are of heavy wrought steel with hardwood boxings.

The frame is constructed so that it may be used as a weight-box should additional weight be required.

Pole sets on top of frame, thus enabling us to use shorter and more rigid hangers. The hitch is underneath the tongue, reducing the draft and neck weight to a minimum. 8-foot, 3 section, 24 inches in diameter. Weight 535 pounds, \$43. Doubletrees and Neckyoke, extra \$2.50.



Economy Lime and Fertilizer Sower

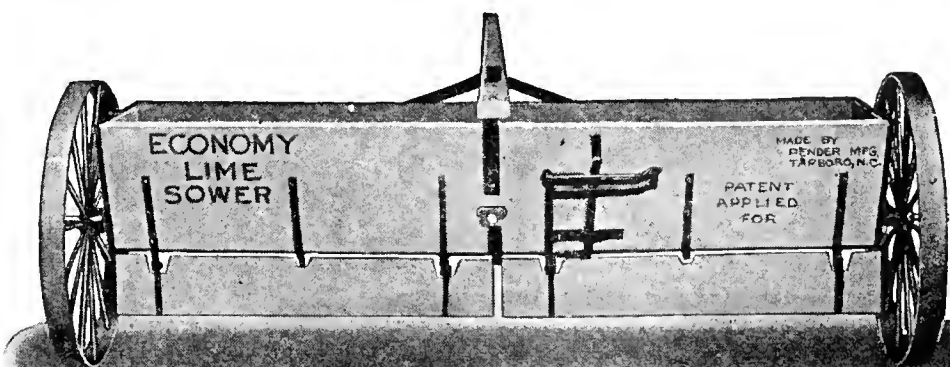
Furnished for one or two horses. In lengths 5, 6, 7, 8, 9, or 10 feet

Very strongly built. Positive feed, caused by rotary feeder-bars attached to spiders, or arms on axle, forcing material out evenly through large, oval-shaped holes in bottom, located 3 inches apart. Each wheel drives its respective half axle. Flow positively controlled and gauged by adjustment of lever on back of machine. Grease-cup in rear feeds grease to center bearings.

Hopper is made of yellow pine and has a capacity of 500 to 700 pounds. Furnished with steel wheels, 36 inches high, with 3-inch tires. Bearings are of solid oak and oil soaked. Capacity 200 to 5,000 lbs. per acre.

No. 800. 8-ft. 2-horse. Weight 375 lbs. \$64.

Doubletree and Neckyoke, \$4 extra. Tractor Hitch in place of pole, \$4 extra. Furnished with 5-inch tires, \$4.50 extra. Prices on other sizes quoted on request.



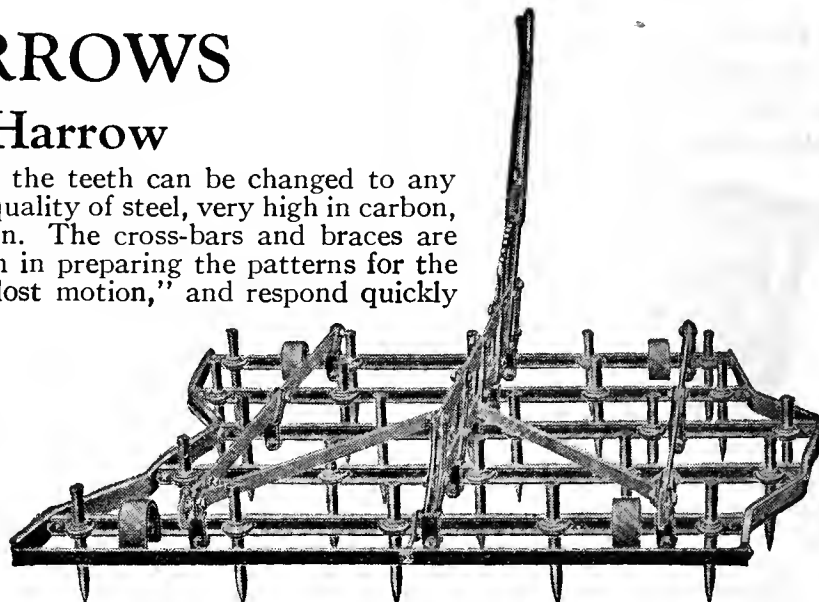
SPIKE TOOTH HARROWS

"Columbian" Steel Lever Harrow

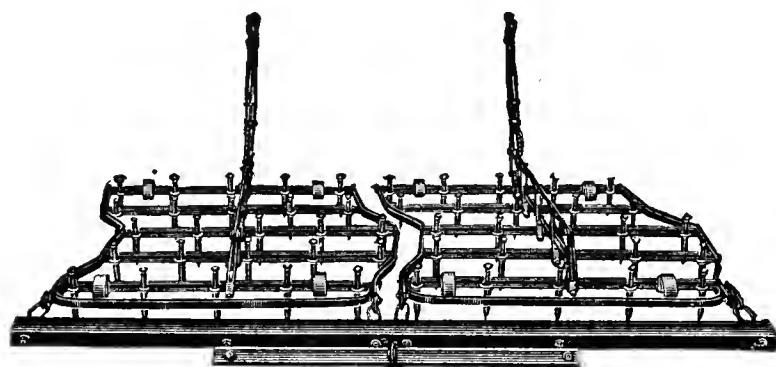
The Columbian Harrow is made with lever adjustment, so that the teeth can be changed to any slope quickly. The main-bars are U-shaped, and made from an extra quality of steel, very high in carbon, which insures it against bending, even under the most severe strain. The cross-bars and braces are rolled flat from same kind of material. Great pains have been taken in preparing the patterns for the different parts, so that when put together they will be free from "lost motion," and respond quickly to the action of the lever.

The tooth-clamp is without doubt the best yet devised and consists of stirrup bolt and back and front boxing. When fastened with this device, the teeth would not be more rigid if a part of the bar itself. Teeth can be raised or lowered any distance. Furnished with $\frac{9}{16}$ -inch teeth. It is securely braced and nicely finished.

		Weight	Width	Price
25-tooth	1 Section	110 lbs.	4 ft.....	\$14 00
50-tooth	2 Sections	250 lbs.	8 ft.....	25 50
60-tooth	2 Sections	280 lbs.	10 ft.....	27 90
90-tooth	3 Sections	425 lbs.	15 ft.....	43 50
120-tooth	4 Sections	565 lbs.	20 ft.....	59 00



Showing 25-tooth Section of Columbian Harrow



50-Tooth Pittsburgh Head-Rail Harrow

Pittsburgh Head-Rail Harrow

This Harrow is equipped with good lever device giving instant adjustment and desired slant to the teeth, thus adapting the Harrow to general-purpose work or for finishing and smoothing operations. It will also answer the purpose of a weeder for the first cultivation of corn and potatoes. The heavy solid steel hitch-bar across the front braces the Harrow securely and is provided with malleable hitch-hooks. Harrow has flat runners, and the close-fitting back boxing in connections with "U" stirrup makes a very secure tooth-fastening. Furnished with $\frac{9}{16}$ -inch teeth.

		Weight	Width	Price
25-tooth	1 Section	100 lbs.	4 ft.....	\$12 00
50-tooth	2 Sections	225 lbs.	8 ft.....	21 00
60-tooth	2 Sections	250 lbs.	10 ft.....	23 90
90-tooth	3 Sections	380 lbs.	15 ft.....	40 00
120-tooth	4 Sections	510 lbs.	20 ft.....	50 00

SPRING TOOTH HARROWS

Iron City Pipe Bar Lever Harrow

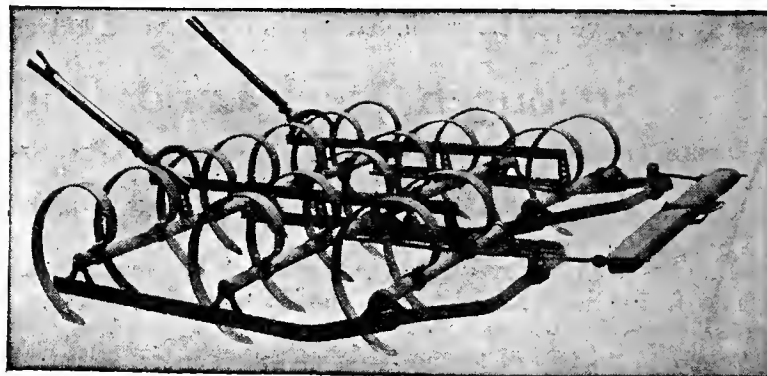
The Iron City Spring-Tooth Steel-Frame Lever Harrow shown here represents one of the most popular types of this class of Harrows.

The Iron City has angle steel frame, runner style, and the front of the Harrow is constructed with a view to prevent the gathering of trash.

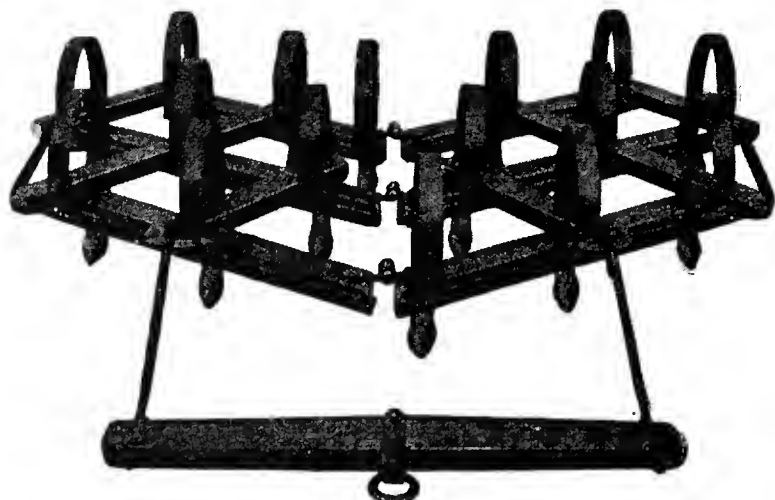
Renewable steel shoes are bolted to the under side of all frame angles, and can be replaced at moderate expense.

The tooth bars are steel pipe, to which the teeth are bolted and held securely with the assistance of spanner clips. All teeth are carefully tested before shipment and are guaranteed against defects.

		Weight	Width	Price
15-tooth	2 Sections	225 lbs.	5 ft. 4 in.....	\$25 85
17-tooth	2 Sections	240 lbs.	6 ft. 0 in.....	27 50
23-tooth	3 Sections	347 lbs.	8 ft. 2 in.....	38 50
25-tooth	3 Sections	362 lbs.	8 ft. 6 in.....	40 00



17-Tooth Iron City Lever Harrow



16-Tooth Pittsburgh Perry Harrow

Pittsburgh Perry Wood-Frame Harrow

Steel Lined, Guarded, Protected Bolt Heads,
Perfect Tooth Seat, Adjustable Hitch

The best Wood-Frame Harrow on the market. Beams full 3 inches; linings $\frac{1}{8}$ -inch angle steel; bolts $\frac{3}{8}$ -inch; teeth are full length and weight, tempered in oil and fully warranted; our tooth fasteners are channel steel. Steel braces support and strengthen the outer end of the Harrow.

These Harrows are well made of best oak and hinged properly so that they will not buckle in the middle, but ride evenly, pulling all teeth in the ground at about an even depth.

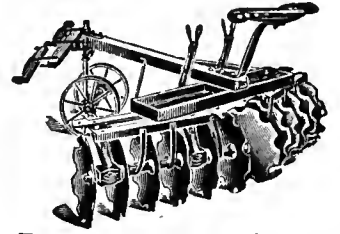
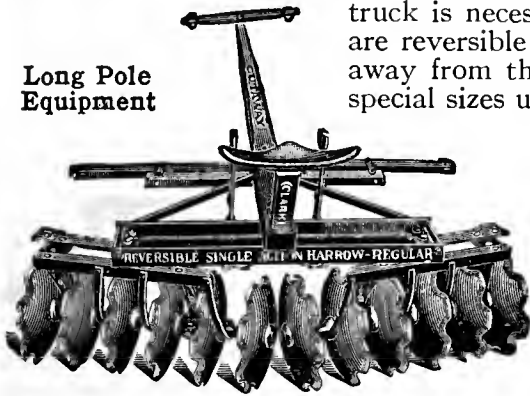
Teeth are made from open-hearth, high-carbon spring steel, oil-tempered and tested.

		Weight	Width	Price
16-tooth	2 Sections	190 lbs.	5 ft. 3 in.....	\$18 25
18-tooth	2 Sections	210 lbs.	5 ft. 11 in.....	19 85
20-tooth	2 Sections	237 lbs.	6 ft. 7 in.....	21 75
22-tooth	2 Sections	261 lbs.	7 ft. 4 in.....	24 85
24-tooth	2 Sections	280 lbs.	8 ft. 1 in.....	27 00

Clark "CUTAWAY" Reversible Single-Action Harrow

The head is built directly on top of the gangs of discs; the weight of the frame and of the driver is carried by the discs. This balances the Harrow with practically no weight on the horses' necks so no tongue truck is necessary. However, tongue truck can be furnished if desired. Gangs are reversible; this enables the orchardist to throw the soil toward the trees or away from them. Extension-head Harrow can be closed for regular fieldwork; special sizes up to 14 feet wide. Write for circular.

Long Pole Equipment



Tongue Truck Equipment

REGULAR HEAD

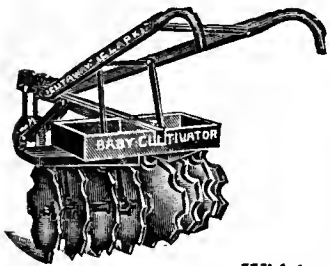
		Hitch	Width cut	Weight	Price
10	16-in. discs, 2-horse, 5 ft.		5 ft.	290 lbs.	\$55 50
12	16-in. discs, 3-horse, 6 ft.		6 ft.	340 lbs.	62 50
10	18-in. discs, 2-horse, 5 ft.		5 ft.	345 lbs.	60 50
12	18-in. discs, 3-horse, 6 ft.		6 ft.	425 lbs.	70 50

EXTENSION HEAD

		Hitch	Width cut	Weight	Price
			7 ft.	315 lbs.	\$58 00
			8 ft.	390 lbs.	67 00
			7 ft.	380 lbs.	64 00
			8 ft.	455 lbs.	75 00

If Tongue Truck is wanted instead of the Long Pole, add \$9.35 to above prices.
If both Tongue Truck and Long Pole are wanted, add \$11 to above prices.

"Cutaway" Baby Cultivator

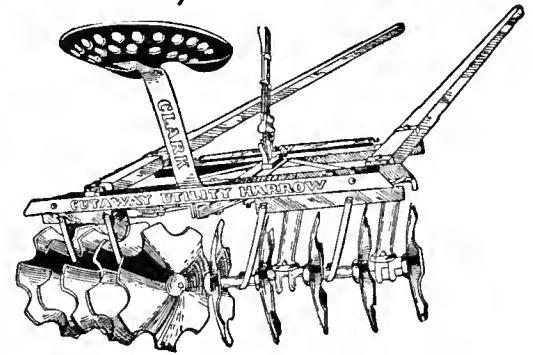


A light, sturdy, one-horse disc Cultivator with 14-inch discs spaced 4 inches apart, for fine work. Gangs are reversible so soil may be thrown toward the row or away from it. Adjustable wheel and handles. Ideal for berries, young trees, and field crops.

		Width cut	Weight	Price
6	14-in. discs	24 in.	90 lbs.	\$25 50
8	14-in. discs	32 in.	105 lbs.	29 50

"Cutaway" Utility Harrow

Especially designed for one-horse use. It is light weight, light draft, and easy to handle. Made very strong and of the best materials. Suitable for the market gardener, florist, or general farmer. Gangs are reversible. 10 14-in. discs, spaced 5 in. apart, 4 ft. wide. Weight 200 lbs. \$41.75.



Clark "CUTAWAY" Double-Action Disc Harrow

The Clark "Cutaway" Double-Action Harrow, with its unit rigid main-frame construction, is famous for its light draft and the thorough work it does. All four gangs of discs are attached to the main frame which holds the rear discs so they always cut between the front discs. All the soil over which the machine passes is thoroughly worked and the surface left level.

There is absolutely no need for a tongue truck on this Harrow; the machine is self-supporting and the pole is jointed so there is positively no cumbersome neck-weight. The absence of a tongue truck makes possible a close hitch which further lightens the draft.

Lever are convenient to the driver's seat, which is placed at the rear where it should be. Cutout discs are regular equipment but either solid or cutout discs, or any combination of

the two types, will be furnished at the same price.

		Hitch	Width cut	Weight	Price
16	16-in. discs, 2-horse, 4½ ft.		4½ ft.	440 lbs.	\$84 50
20	16-in. discs, 3-horse, 5½ ft.		5½ ft.	555 lbs.	101 50
24	16-in. discs, 4-horse, 6½ ft.		6½ ft.	630 lbs.	112 50

If two-horse hitch is wanted in place of three, or three-horse hitch in place of four, deduct \$2 from the above prices.

Clark "CUTAWAY" Flexible Double-Action Tractor Disc Harrow

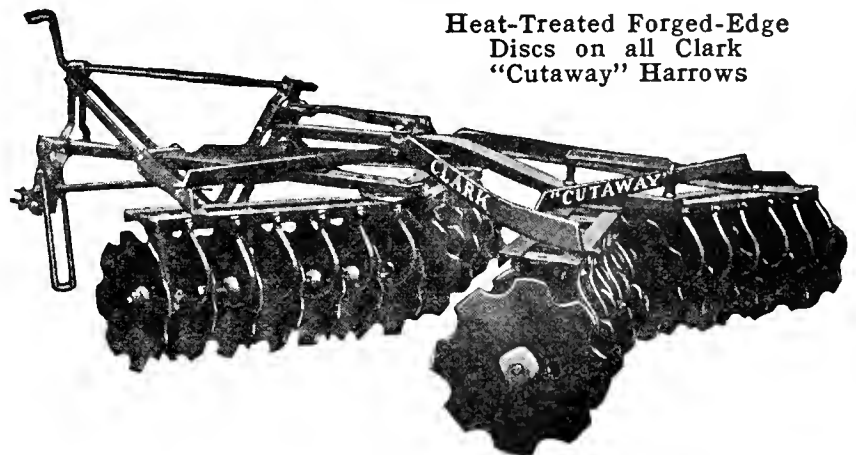
The Clark "Cutaway" Flexible Tractor Harrow gives all the flexibility that can be desired and at the same time retains many of the valuable and exclusive Clark "Cutaway" features. This is an unusually sturdy Harrow with its heavy angle-steel and channel-steel frame construction. All four gangs are angled by a powerful crank and screw control. The rear section can be quickly removed by taking out two bolts and the front section of the Harrow used alone if desired.

The construction of this Harrow employs the practical over-draft principle which aids penetration and provides clear space in front of the discs with no low projections to catch on obstructions. Cutout discs are regular equipment. Solid discs, or any combination of the two types, will be furnished at the same price. There is also a complete line of rigid-frame Double-Action Tractor Harrows in both regular and extra-heavy service models.

No. of Discs	Diam. of Discs	Width of Cut	Weight	Price
20	16 in.	5½ ft.	565 lbs.	\$103 50
24	16 in.	6½ ft.	755 lbs.	125 00
28	16 in.	7½ ft.	860 lbs.	135 00
20	18 in.	5½ ft.	695 lbs.	122 00
24	18 in.	6½ ft.	850 lbs.	136 00
28	18 in.	7½ ft.	950 lbs.	148 50

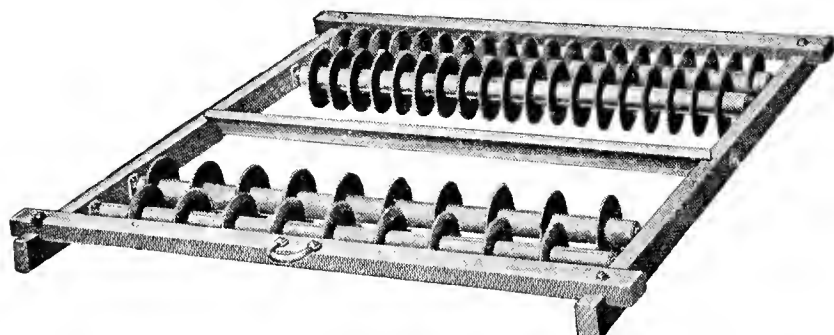
COMPLETE CATALOGUE OF CLARK CUTAWAY HARROWS
ON REQUEST

Heat-Treated Forged-Edge
Discs on all Clark
"Cutaway" Harrows



Meeker Smoothing Harrow

Prepares a Fine Seed-Bed



The Meeker Smoothing Harrow is a perfect pulverizing and smoothing Harrow and land-roller combined. It has four sets of rollers containing 46, 58 or 82 discs, depending upon the size, the discs being set so as to overlay or meet.

These discs grind up all lumps, leaving the soil fine and smooth. The discs of one roller work between those of the other, which prevents clogging even in damp soil. The board in the center, set at an angle, can be adjusted up and down and serves as a leveler.

The Meeker will prepare any type of soil—sand, clay or muck—stirring and pulverizing it to a depth of 4 or 5 inches.

PRICES

4-ft. 6-in. x 4-ft. Harrow, with 46 8-in. discs.....	\$30 00
4-ft. 6-in. x 4-ft. Harrow, with 46 10-in. discs.....	33 75
6-ft. 8-in. x 6-ft. Harrow, with 58 8-in. discs.....	35 00
6-ft. 8-in. x 6-ft. Harrow, with 58 10-in. discs.....	37 50
8-ft. x 6-ft. Harrow, with 82 8-in. discs.....	45 00
8-ft. x 6-ft. Harrow, with 82 10-in. discs.....	52 50

Also a very valuable implement for use on golf-courses.
Ask for special circular

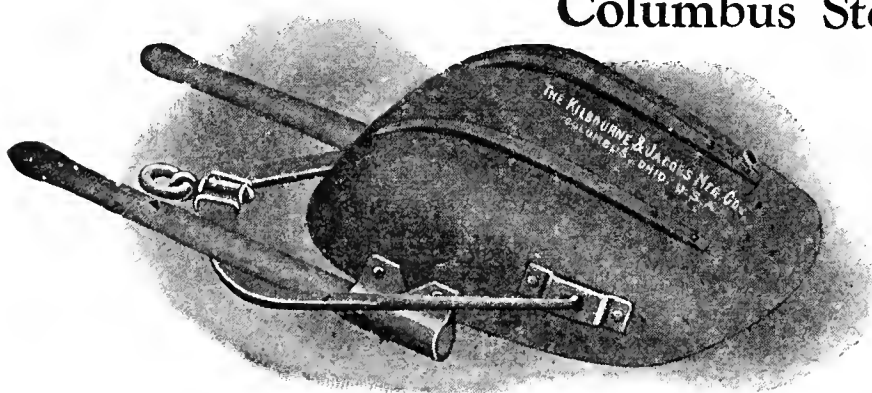
Dayton Tractor Disc Harrow

A strong and substantially built Disc Harrow that can be used with any make of tractor. It has several distinctive features and is suitable for general farm-work. The angle of the gangs may be increased or decreased by means of a wheel which is within easy reach from the tractor seat, or they may be controlled independently of each other by means of a simple adjustment in the connection between the rear gangs and the angling arrangement.

The flexibility of the frame saves the Harrow from the wrenches and twists due to uneven ground, and yet the rear gang is held to its work perfectly and will not sway from side to side.

The bearings are made of a wood boxing on top while on the bottom there is provided a reservoir for an oil-soaked felt pad. As the bearing turns it transfers oil to the wood boxing and keeps it continually lubricated, eliminating the use of inconvenient grease-cups. The discs are heat-treated for hardness, toughness, and strength. Both gangs are equipped with scrapers.

No. Discs	Diam. Discs	Width of Cut	Weight	Price
24	16 in.	6 ft.	790 lbs.....	\$97 50
28	16 in.	7 ft.	865 lbs.....	105 00
32	16 in.	8 ft.	945 lbs.....	113 50

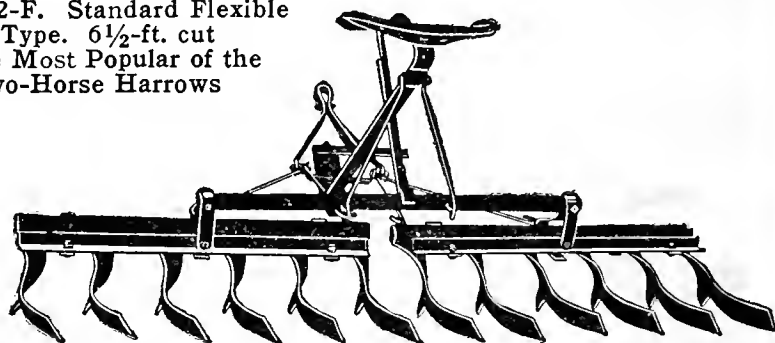


Columbus Steel Drag Scraper

"Acme" Coulter Harrow

A PULVERIZING HARROW AND SURFACE CULTIVATOR

No. 12-F. Standard Flexible
Type. 6½-ft. cut
The Most Popular of the
Two-Horse Harrows



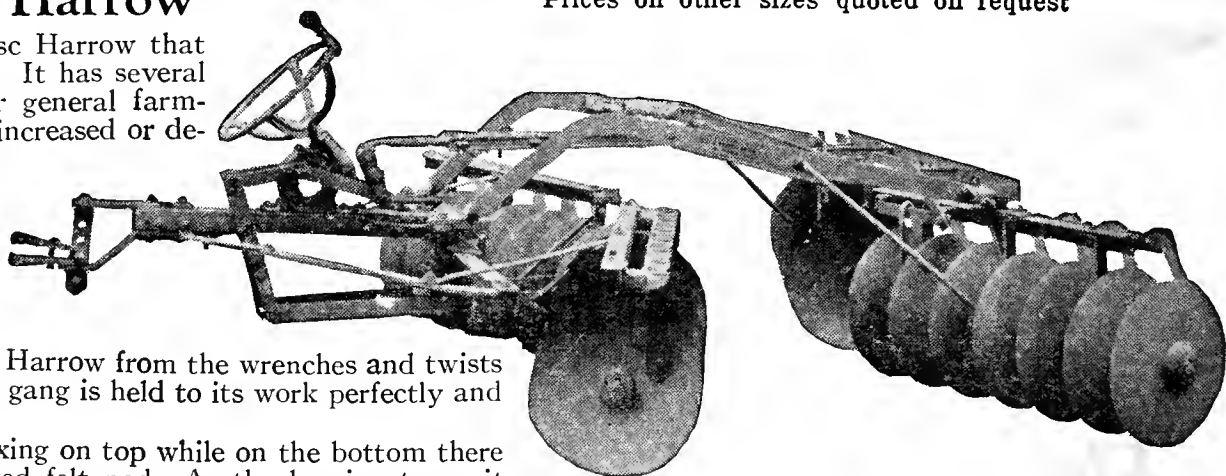
The coulters on "Acme" Pulverizing Harrows work down between the furrow slices, filling the air-spaces with finely pulverized soil—lumps and clods are thoroughly broken up and pulverized; trash or stubble that has been carefully plowed under is not dragged to the surface as is the case with many other types of Harrows but is left beneath the surface where it rapidly rots and adds humus to the soil. The seed-bed prepared by the "Acme" Harrow is so well compacted that the seed will germinate rapidly; the surface is finely mulched so that the moisture is conserved.

New Coulters make an old "Acme" Coulter Harrow almost as good as new.

No.	Weight	Width	Description	Standard Type
*6	77 lbs.	3 ft.	1 horse, 1 section, 6 coulters	\$17 50
*8	94 lbs.	4 ft. 4 in.	1 horse, 1 section, 8 coulters	24 00
*12	112 lbs.	6 ft. 6 in.	2 horse, 1 section, 12 coulters	26 75
12-F	124 lbs.	6 ft. 6 in.	2 horse, 2 section, 12 coulters	31 00
16-F	151 lbs.	8 ft. 6 in.	2 horse, 2 section, 16 coulters	38 00
Coulters	3½ lbs.			90

*Rigid Frame.

Prices on other sizes quoted on request



We carry in stock a line of repair parts for the Implements we sell. We also make a specialty of furnishing repairs for all makes of farm machinery

The most economical tool made for making and mending roads. The Columbus is the highest type of Drag Scraper made. The bowls are stamped from a single sheet of extra hard steel plate and are of seamless construction throughout. The round-top handles are a distinguishing feature. The bails are of steel and of improved pattern, with strong and perfectly working swivels.

No. 1. Approximate capacity 7 cubic feet. Size of bowl: length over all 32½ inches; width 33 inches; greatest depth 10½ inches; weight 105 pounds. With runners, \$11.

No. 2. Approximate capacity 5 cubic feet. Size of bowl: length over all 30½ inches; width 29½ inches; greatest depth 10½ inches; weight 95 pounds. With runners, \$10.50.

Iron Age Potato Planter

Assisted Feed or Automatic Feed. One-, Two-, Three-, or Four-Row Seed Hopper Interchangeable

The **Iron Age** Assisted-Feed (two-man) Planter is machine-fed, with hand corrections made by boy or man, and approaches most nearly 100 per cent planting.

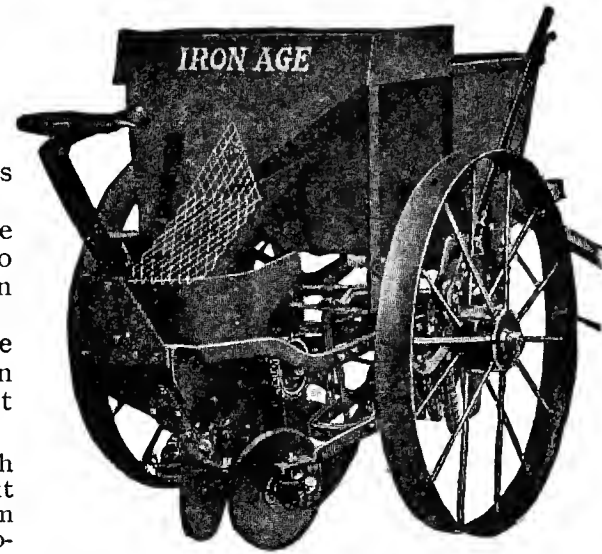
The **Iron Age** Automatic-Feed Planter has adjustable picks for small, medium, or large seed. Has a very high degree of accuracy in planting—very few misses or doubles, and no bruising of seed. Seed hopper interchangeable with Assisted-Feed Planter. Picker wheel in plain view of driver at all times.

Both types of Planters are built with or without fertilizer attachment. All **Iron Age** Planters are equipped to place the fertilizer in bands 2 inches from the seed-piece, either on the level with it or a little below it. This method has not only proved to be the safest but produces the largest yields.

No. 410R. One-row, Automatic Feed.	\$168 50
No. 424R. One-row, Assisted Feed . . .	168 50
No. 431R. Two-row, Automatic Feed.	345 00
No. 434R. Two-row, Assisted Feed. . .	345 00
Doubletree and Neckyoke, extra if wanted.....	4 00
Tractor Hitch, extra if wanted.....	3 50

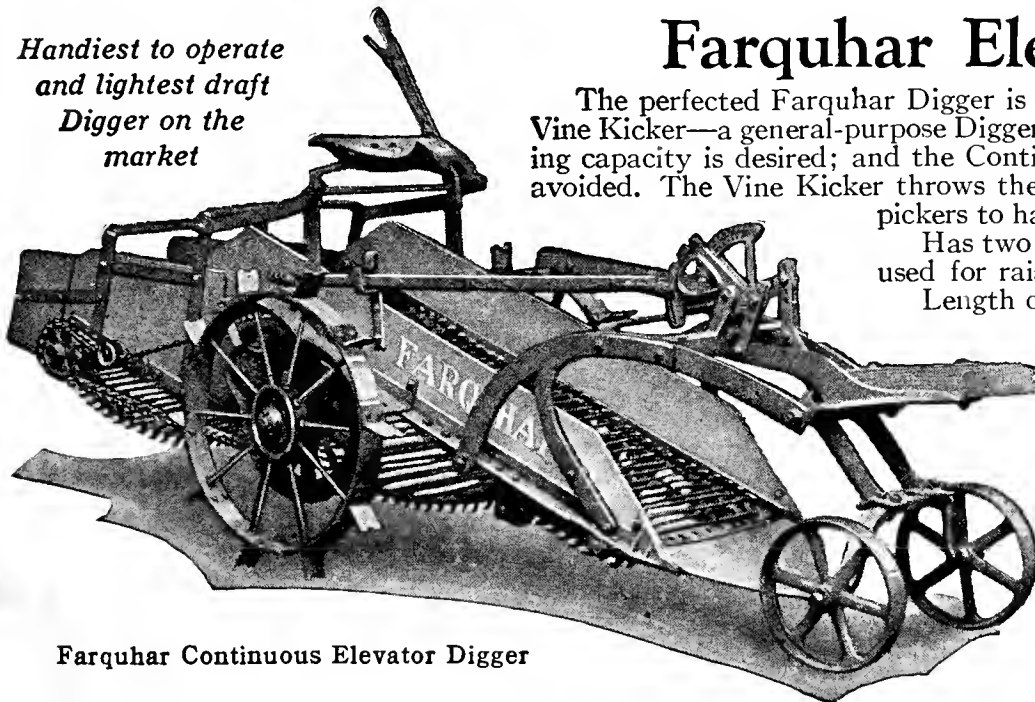
Prices are for Planters equipped with Fertilizer Attachment. For Planters without Fertilizer Attachment, deduct \$41 from prices of One-row, and \$82 from prices of Two-row Planter.

Prices of Three-row and Four-row Planters quoted on request. Ask for complete Catalogue of **Iron Age** Planters.



Iron Age One-row Automatic-Feed Planter

*Handiest to operate
and lightest draft
Digger on the
market*



Farquhar Continuous Elevator Digger

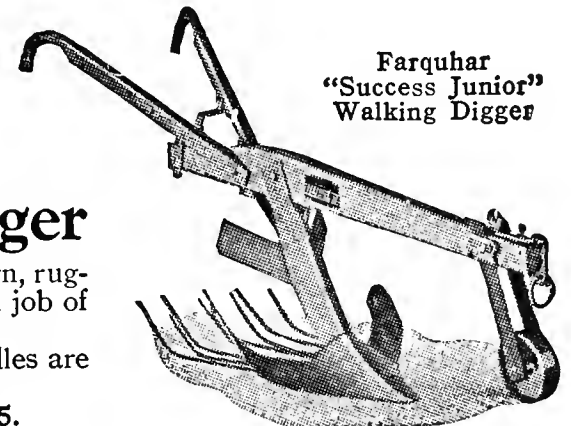
Farquhar Elevator Potato Digger

The perfected **Farquhar** Digger is made in three styles: the Shaker Type, with or without Vine Kicker—a general-purpose Digger; the Extension Elevator Type, where increased separating capacity is desired; and the Continuous Elevator Type where drop from main elevator is avoided. The Vine Kicker throws the vines between the rows, making it unnecessary for the pickers to handle the vines.

Has two levers. One is used for regulating the depth, the other is used for raising and lowering the Digger at the ends of the rows. Length of elevator from shovel-point to rear of elevator chain, 6 ft.; width, 22 in.

Shaker Digger without Vine Kicker.....	\$137 50
Shaker Digger with Vine Kicker.....	152 50
Continuous Elevator Digger.....	147 50
Extension Elevator Digger.....	151 50

ASK FOR DESCRIPTIVE CIRCULAR



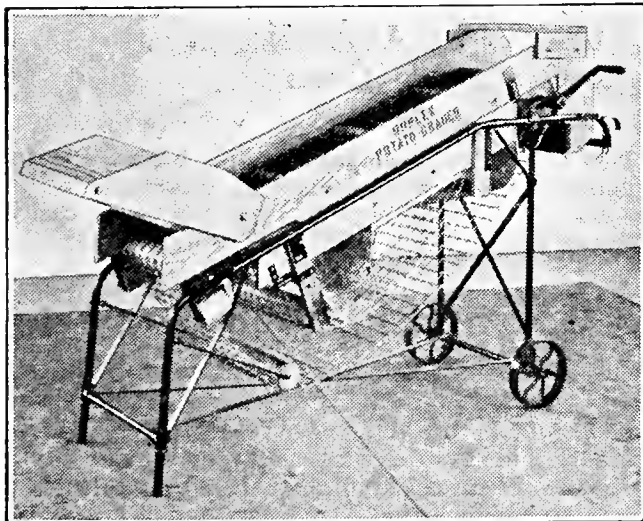
**Farquhar
"Success Junior"
Walking Digger**

Farquhar "Success Junior" Walking Digger

The most popular plow-type Potato Digger for the smaller growers. It is simple in design, rugged in construction, is adjustable as to depth, light draft, easily operated and does a clean job of digging. Will not cut or bruise the potatoes.

The beam and handles are made from carefully selected and well-seasoned oak. Handles are adjustable to suit the convenience of the operator.

Price, with single wheel foretruck as shown, \$14.50; with double wheel foretruck, \$16.75.



"Duplex" Potato Grader

The advantage of grading potatoes by machine is now universally recognized. In the "**Duplex**" we offer a well-designed and substantially built Grader. The main frame is heavy wrought-iron pipe, well balanced and well braced, portable and mounted on wheels.

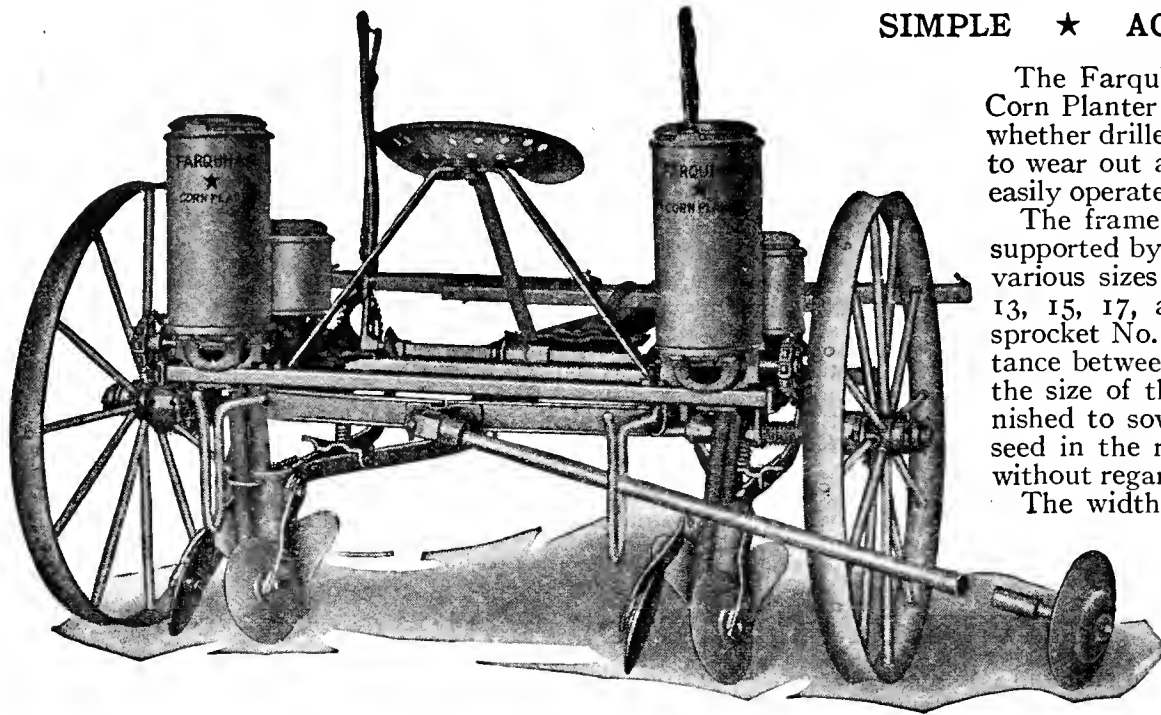
Grading aprons or belts are made to specification when required in regard to size of openings. The standard machine is fitted with grading aprons grading United States standards for both No. 1 and No. 2 sizes. Grading aprons or belts are made of round steel wire absolutely smooth on the grading side and so formed that it will cause the belt to vibrate continuously, thus effecting perfect grading.

Model AA Hand Grader. Grades two sizes and eliminates the culls. Complete with bagging attachment for the No. 1 size. Capacity approximately 150 bus. per hour. \$57.50.

Model A Hand Grader. (Not illustrated.) Same construction and capacity as Model AA Grader but equipped with side elevator with bagging attachment for both the No. 1 and No. 2 sizes. \$65.

Farquhar Star Two-Row Corn Planter

SIMPLE ★ ACCURATE ★ DEPENDABLE



Farquhar Corn Planter with Shovel Opener and Disc Coverer

Farquhar Star has a regulating lever for each opener, hence is the ideal planter for both hillside and level ground. Furnished with either double disc, runner, or shovel openers, and with adjustable disc or scraper coverers. Steel wheels 36 inches high with concave rims. Doubletrees and neckyoke regular equipment.

Without Fertilizer attachment.....\$75 00 With Fertilizer attachment.....\$92 75

Above prices are for Planter equipped with either pin shovel furrow-opener or runner furrow-opener. If wanted with spring shovel furrow-opener or disc furrow-opener, add \$4.

The Farquhar Star is a simple and very positive drop Corn Planter that produces a most uniform stand of corn, whether drilled or planted in hills. It has no intricate parts to wear out and no fine adjustments to make, hence it is easily operated and has long life.

The frame is strong and made of "I" beam steel and supported by a heavy, round axle. Plates and sprockets of various sizes are furnished to drop a single kernel every 13, 15, 17, and 19 inches. The double-hole plates and sprocket No. 7 drop two kernels every 26 inches. The distance between the hills may be increased in proportion to the size of the sprocket used. Special plates can be furnished to sow other seeds. The Farquhar Star drills the seed in the row but it may be adjusted to drop in hills without regard to checking or cross cultivation.

The width of planting is adjustable and rows may be spaced 39 inches, 42 inches, or 45 inches apart. When set, the runners or openers are rigid and free from all swinging motions. Another feature which makes the Farquhar Star superior is the separate depth adjustment of each opener. Two-row single lever planters operating on steep hillsides have no means of securing uniform depth of planting. But the Far-



Price, with Fertilizer Attachment, \$28.50

The Avery New Union Corn Drill plants accurately because the double pitman drive insures positive action all the time. Also because the seed-plates are extra large, giving all the holes plenty of time to fill.

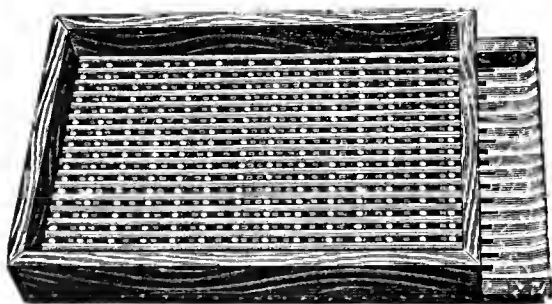
It plants to the right depth because the depth of planting in any kind of soil can be regulated by the adjustable opening shoe in connection with the adjustable clevis.

The frame is all steel which eliminates the use of castings. There are no sprockets to clog up, no chains to break.

The Fertilizer Attachment is gear-driven direct from the main pitman, again eliminating sprockets and chains.

The hoppers are extra large and hinged so they can be thrown back, exposing all the gears, or can be lifted off the frame without using a tool. Planter is regularly furnished with a set of four plates.

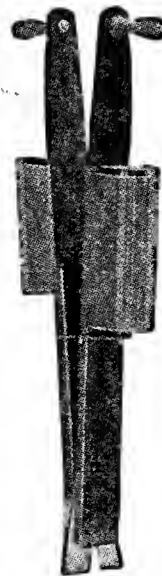
Pea and Bean Plates can be furnished at an extra charge of \$1.



Acme Corn Planter with Fertilizer Attachment

Simple—Durable—Economical

This combination Corn Planter with Fertilizer Attachment is a two-hand slide type with an adjustable segmental slide of pressed steel; the hoppers, hopper bottoms, and conveyor tubes are of steel. The polished steel jaws are arranged to drop corn on each side and a little above the fertilizer or phosphate, which is dropped in the center. Fertilizer drop is regulated to suit the operator. A good tool for hand planting and hand fertilizing at the same time. No. 308. Price \$3, postpaid.



The Eclipse All-Steel Rotary Hand Corn Planter

Acme Planter This Planter is of all-steel construction, but nevertheless light in weight and will last for years. Simple in operation and works easily. Has 4 changeable discs. No. 2. Price \$2.50, postpaid.

Eclipse Planter

Perfection Corn-Grader

A seed Corn-Grader has become a necessity in getting a uniform stand of corn. No planter will drop uniformly unless the seed is graded. Graded seed insures perfect dropping, stronger plants, and increases the yield 5 to 15 bushels per acre.

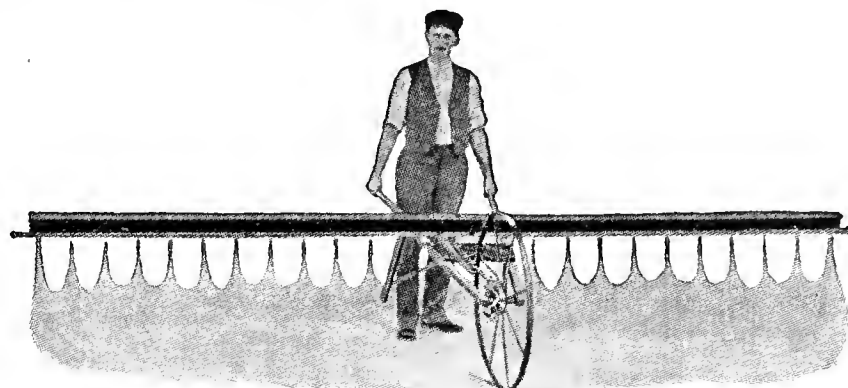
There are four grades of corn on every ear. This Grader sorts them out in one simple operation. It has a guard on the lower screen to prevent the spilling of the corn while grading. Capacity 4 to 6 bushels per hour. Size 11 x 19 inches. Price, \$1.25. Postage 15 cts. extra.

Thompson's Royal Chain Feed Grass Seeder

Sows all small seeds like Clover, Timothy, and Alfalfa.

This Grass Seeder has won for itself first place among all kinds of Grass Seeders. Most accurate and economical machine for sowing clover, timothy, alfalfa, and other small seeds broadcast. Runs easily, and sows evenly in windy weather. The quantity of seed sown is accurately governed by the wheel, which moves correspondingly slow or fast as the machine is run over the ground. It is instantly thrown out of gear, and the amount of seed sown is quickly governed by changing the pin in the index plate as thereon indicated. Does not injure or bunch the seed, but evenly distributes it the full length of the hopper.

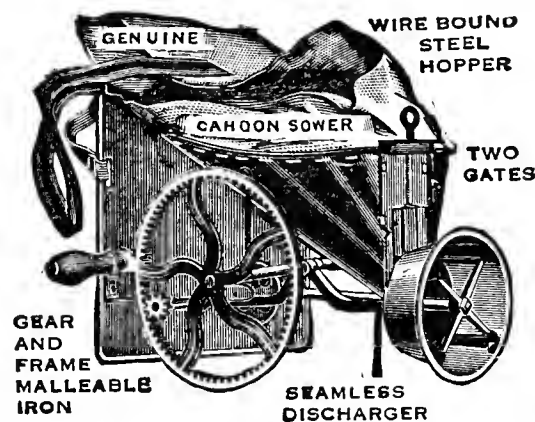
With 12-foot Hopper.....\$14 00
With 14-foot Hopper..... 14 75
With 16-foot Hopper..... 15 50



THOMPSON NO. 106 WHEELBARROW SEEDER (similar to above Thompson's Royal Chain Feed Grass Seeder) is suitable for sowing lawn seed on a large scale. Gives uniform 10-foot spread; adjustable feed. Weight, 60 pounds. Price \$18.

The Cahoon Seeder

The Cahoon Hand Broadcast Seed Sower, suitable for sowing all kinds of grain and grass seed, is one of the most efficient on the market today. The frame and handle gear are of malleable iron; the shafts of high-grade steel, with the gears securely fastened. The large gate is for grain and the small gate for grass seed; easily adjusted. The Cahoon is speeded so that the crank makes a complete revolution with each step. The bag is of heavy duck and holds about 22 quarts. Price \$5.50, postpaid.



The Cyclone Seed Sower

This Seed Sower can be used for sowing clover, timothy, lawn grass seed, and all other seeds that can be sown broadcast.

All the working parts are attached to a rigidly built frame of kiln-dried lumber. The Slope Feed-Board gives the seed a gravity flow and always keeps the hopper outlet filled without tilting the machine. The Automatic Feed Adjustment gives a positive force-feed and is quickly adjusted for different seeds. The touch of a lever will start or stop the flow of seed. Seed cannot clog or "rush." The bag holds about 1/2 bushel. Price \$2.75, postpaid.

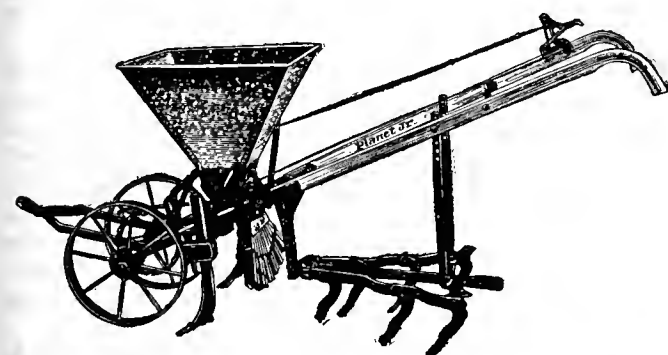


Planet Jr. No. 230A Fertilizer Distributor and Cultivator

Saves Time and Labor—Produces Bigger Crops

A new and highly recommended method of applying fertilizer to growing crops is to distribute it uniformly on the ground between the rows and then to cultivate it thoroughly into the soil. This insures all the feeder roots growing in the middle of the row getting their share of food. It distributes the fertilizer through six adjustable spouts, spreading from 4 to 30 inches on the ground. Cultivator closes to 12 inches and opens to 21 inches. The quantity of fertilizer can be regulated from 200 to 2,000 pounds per acre. It has two wheels and is intended for use with one horse. Capacity of hopper, about 100 lbs. Price \$44.

Planet Jr. No. 220 Fertilizer Distributor. A hand machine similar to the No. 230A illustrated above, except it has a single wheel and does not have the cultivating attachment. Capacity of hopper, 50 lbs. Price \$29.50.



New Way Lime Spreader

The New Way Spreader provides an easy and convenient way to broadcast lime and all kinds of commercial fertilizer. Hopper is 36 inches wide; fans 22 inches from the ground, spreads one rod wide. Gear driven; each wheel operates independent of the other. Attaches to any wagon or truck in a jiffy. Weight, 200 lbs. Price \$39.50.

SCOTT'S BETTER SEEDS

The best is always the cheapest in the end. Sow Scott's Seeds for extra profits.

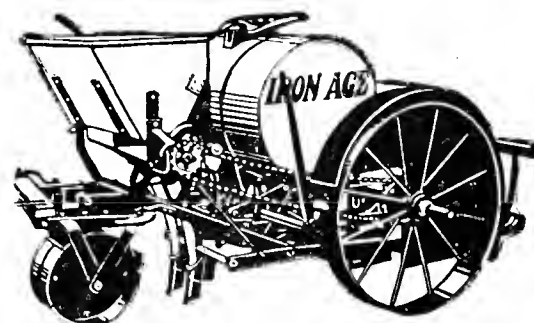
IRON AGE Transplanters

PLAIN-SPACER-CHECK ROW

Set Plants by Positive Action of Plant-Setting Gauge

The Iron Age Transplanter has been designed to meet a demand for an accurate and absolutely reliable plant-setter. It does away with one of the hardest "back-breaking" operations on the farm.

Every plant is watered when set. The Iron Age method of applying water at root of plant, leaving dry soil on top, insures the moisture being retained and prevents baking of soil. Plants may be set during the hottest and driest season.

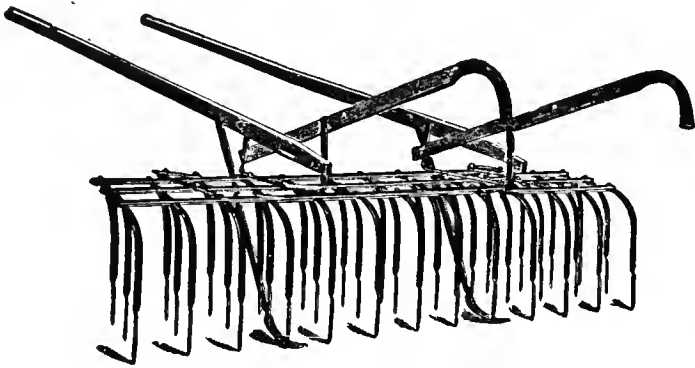


SPECIAL CIRCULAR AND PRICES ON REQUEST

Hallock Walking Weeder

No successful farmer of today considers that his outfit of modern tools is complete unless he has a Weeder. The experience of the last few years has satisfied all users of this tool that it is one of the most important on the farm, and is an absolute necessity for best results. In its operation it works over and among the plants without injury, destroys all the small weeds, breaks up the crust, mellows the ground, and in this way puts the plants in best possible condition for rapid growth. The Weeder is substantially built from the best of materials. The teeth are located in three rows, and they are made of high-quality steel all properly shaped for best work. Equipped with runners for transporting to and from the field. Made in two sizes.

7½-foot, with 39 teeth and runners. Weight 90 lbs.\$15 00
9-foot, with 45 teeth and runners. Weight 100 lbs. 16 75



Farquhar Riding Weeder

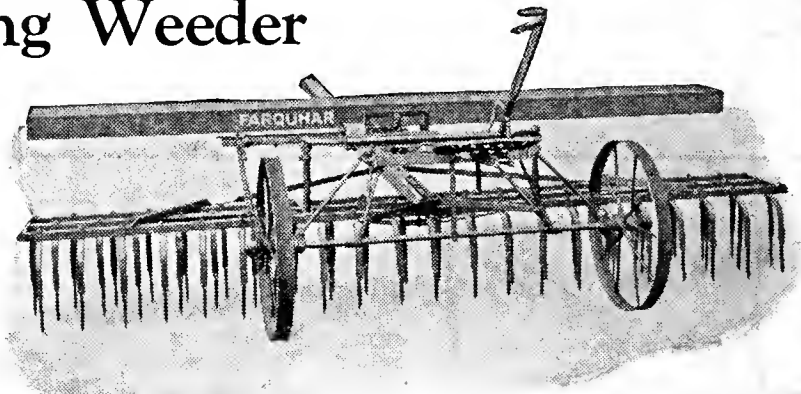
Kills Weeds. Conserves Moisture. Stimulates Plant-Growth

This is the most profitable implement on the farm. It may be used immediately after planting, keeping the surface of the soil loose and friable and at the same time destroying the weeds when they are easy to kill.

The Farquhar Riding Weeder has distinctive features which commend it to progressive farmers: Frame is made of angle iron and is strongly built. Wheels are 30 inches in diameter and are mounted on a steel axle with adjustable axle braces. The wheel-spread is adjustable from 46 to 60 inches, straddling one or two rows when spaced from 30 to 42 inches apart. Has 63 teeth of high carbon steel.

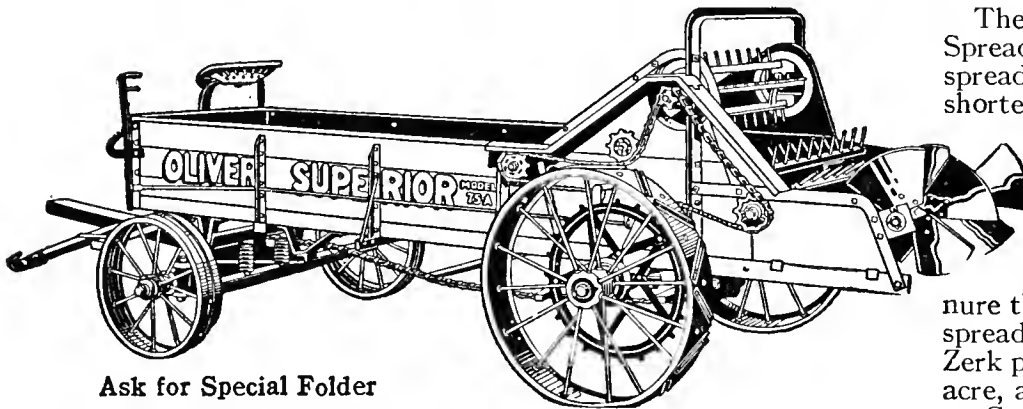
The Weeder is nicely balanced which assures easy operation and a more even and uniform cultivation.

Can be furnished with Grass Seed Attachment. Quantity ranges from 4 to 20 quarts per acre. Width 12 feet. Price \$48.75. Standard Neck yoke and Evener \$4.25. Wide Neck yoke and Evener \$6. Grass Seed Attachment, extra if wanted, \$24.50.



Oliver Superior Manure Spreader

With Many Advanced Features That Make Easier Handling, Better Spreading, Longer Life



Ask for Special Folder

The value of manure as fertilizer is well known. Here is a Spreader that makes it simple to get it on the ground properly spread, in correct amounts, with the least possible labor in the shortest space of time.

The frame of the Oliver Superior is made entirely of steel. Sills are single-angle beams extending the full length of the Spreader. Box is of clear long-leaf yellow pine. The beater consists of the main 8-bar cylinder and the 4-bar top cylinder. Eight cleaver-shaped blades of the Wide Spread, revolving at high speed, pulverize the manure thoroughly and distribute it evenly over the full width of the spread. All shafts run in Hyatt roller bearings and are Alemite-Zerk pressure lubricated. The feed-range is from 4 to 28 loads per acre, and is adjustable from the seat.

Capacity, 75 bus. Weight 1,565 lbs. Price, with 2-horse hitch or tractor hitch, \$190. Brake extra, if wanted \$9. 3-Horse hitch, extra \$4.40.

Peoria Union Combined Grain Drill

The Peoria Drill is a combination Grain and Fertilizer Drill which will handle perfectly all kinds of cereal grain and any kind of fertilizer. The many fine features built into this Drill assure the user the best and most advanced Drill on the market today. The frame is strongly constructed and properly braced to withstand all strain.

The multiple gear and sliding pinion mounted on the drive shaft permits the sowing of any desired quantity of grain from two pecks to five bushels per acre. The flow of fertilizer is also easily regulated to any desired quantity per acre.

Prices with Fertilizer and Grass Seed Attachments

Pin Hoe Drills

9 Pin Hoes.....	\$147 50
10 Pin Hoes.....	156 00
11 Pin Hoes.....	166 00

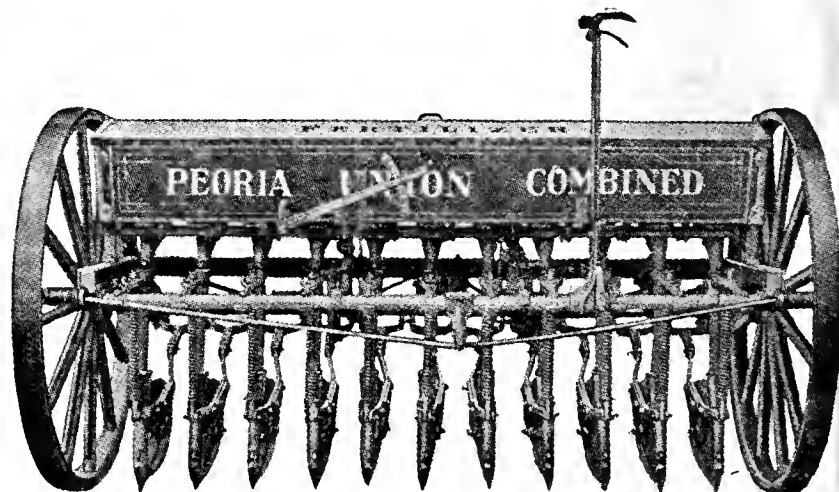
Spring Hoe Drills

9 Spring Hoes.....	\$150 00
10 Spring Hoes.....	159 00
11 Spring Hoes.....	169 50

Single Disc Drills

9 Single Discs.....	\$157 50
10 Single Discs.....	166 00
11 Single Discs.....	177 00

Prices on other sizes quoted on request. Ask for Special Catalogue.



Gravely Garden Tractors and Power Mowers

For Soil Tillage and General Lawn Upkeep

We offer two models of power-driven Garden Tractors that have been tried and approved by thousands of users from coast to coast. They are made by a reliable manufacturer whose efforts are devoted entirely to making these machines and their attachments. The motors are designed for Tractors and are built in the Gravely factory.

The Model D is a single-wheel outfit with 2 H. P. Motor and the Model L is a two-wheel outfit with pneumatic tires and 5 H. P. Motor. Either model can be furnished with attachments for plowing, harrowing, cultivating, and mowing.

Model D Gravely

Here are four important reasons why the Model D Gravely has long been the outstanding Garden Tractor:

1. Single Wheel Traction.

The entire weight falls on the single drive wheel where it is needed.

2. Perfect Balance.

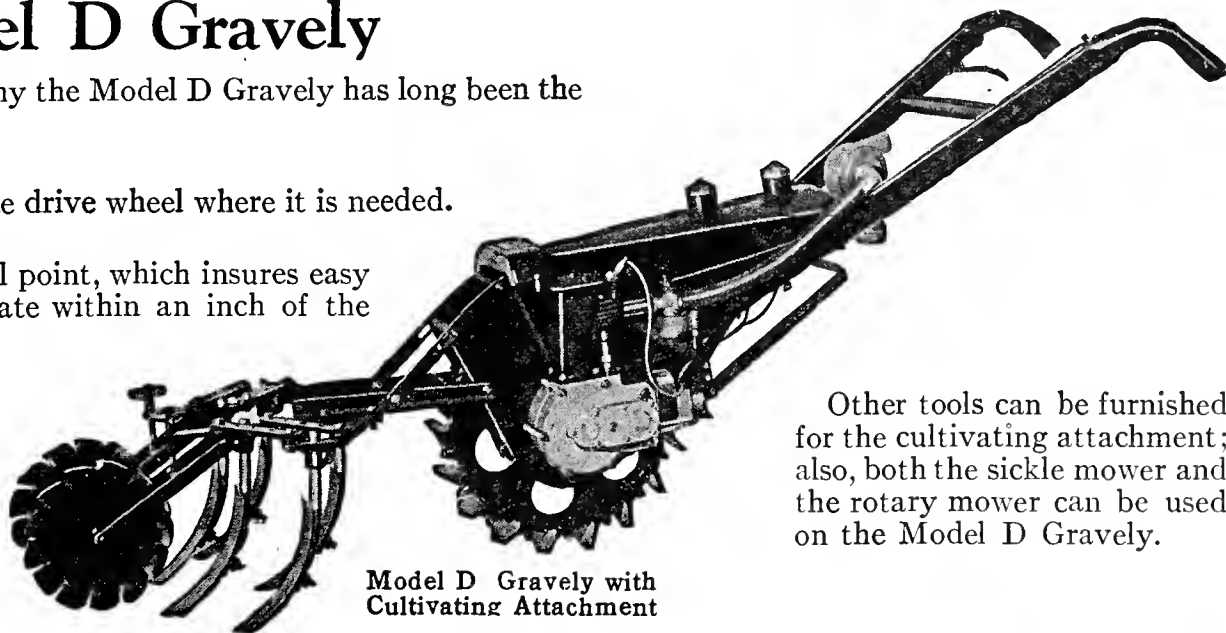
The weight is centered on a pivotal point, which insures easy guiding and turning. You can cultivate within an inch of the plants or away at will.

3. Narrow Row Cultivation.

The wheel is but $3\frac{1}{4}$ inches wide. This enables you to work your narrow-row crops with perfect safety.

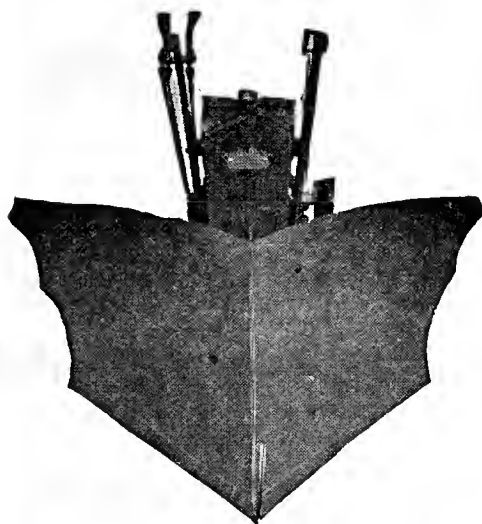
4. Front Tool Hitch.

This means closer, more accurate work with no damage to growing plants.



Model D Gravely with Cultivating Attachment

Other tools can be furnished for the cultivating attachment; also, both the sickle mower and the rotary mower can be used on the Model D Gravely.



Model L Gravely, equipped with Sidewalk Snow Plow

Model L Gravely

The Model L Gravely will do a complete job of mowing under any ordinary conditions. You can use either the 42-inch Sickle Bar Mower or the regular 30-inch Reel Type Mower. Both are completely power-driven. When you use the Sickle Mower you can cut the heaviest weeds, and in places where no other machine would possibly operate. By simply removing four bolts you can change to the Reel Type Mower for mowing your finest lawns.

All other Gravely attachments, such as the Cultivating Tools, Power Plow, and Snow Plow, can be used on the Model L.

Before buying any Tractor or Mower, allow us to show you the Gravely. A demonstration will not obligate you

Cemeteries, country clubs, park departments, municipalities, large estates, etc., find many uses for the Gravely: the Sickle Mower for the rough cutting and the Rotary Mower for the finer cutting. In the winter the Gravely can be equipped with Snow Plow for cleaning sidewalks.

"Power vs. Drudgery" is the title of the Catalogue showing the complete line of Gravely Power Equipment. It illustrates and describes all the attachments which can be used on these machines.

Complete Catalogue and Price-List on request.



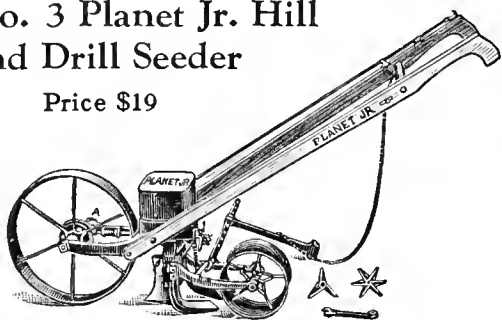
Model L Gravely with 42-inch Sickle Bar Mower

Can be equipped with Rotary Mower, Cultivator, Power Plow, and Snow Plow.

Seed Drills and Wheel Hoes

No. 3 Planet Jr. Hill and Drill Seeder

Price \$19



A favorite among market-gardeners everywhere. Sows accurately practically all vegetable and some flower seeds in drills or hills. The change from drilling to hill-dropping can be made in an instant. Holds 3 quarts of seed. Weight, 33 lbs.

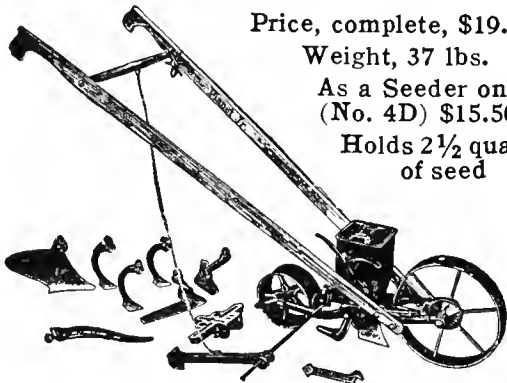
No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, and Plow

Price, complete, \$19.50.

Weight, 37 lbs.

As a Seeder only
(No. 4D) \$15.50

Holds 2½ quarts
of seed



Plants in hills 4, 6, 8, 12, or 24 inches apart. Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily.

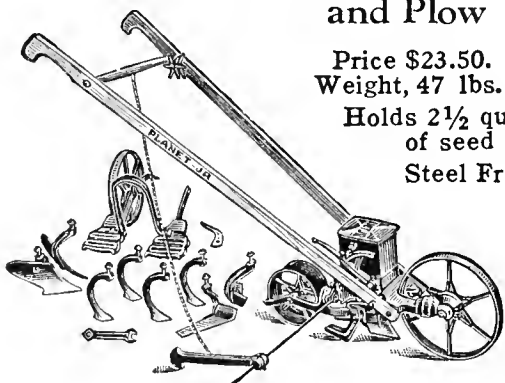
No. 4D, Hill and Drill Seeder, same as above less the cultivating attachments, \$15.50.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double and Single-Wheel Hoe, Cultivator, and Plow

Price \$23.50.

Weight, 47 lbs.

Holds 2½ quarts
of seed
Steel Frame



As a Seeder it is practically the same as the Planet Jr. No. 4, and as a Wheel Hoe it has the same steel frames and cultivating attachments as the Planet Jr. No. 12 Double-Wheel Hoe.

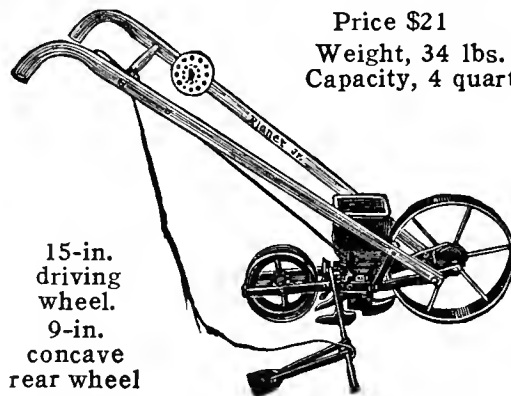
Two acres a day can easily be worked, and when it is done it will be a better job than several men could have done in the same time with hand hoes.

Ask for a Planet Jr. Catalogue

No. 300 A Planet Jr. Drill Seeder

Price \$21

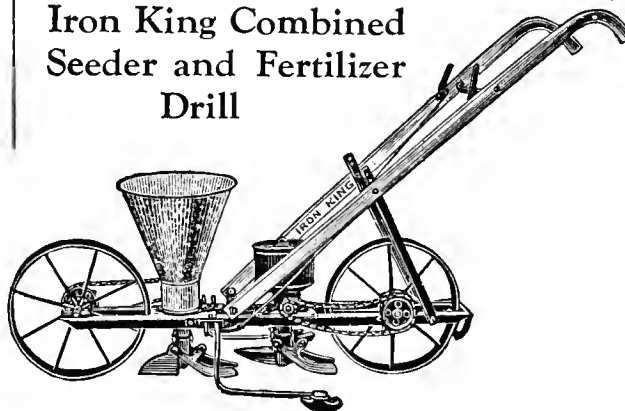
Weight, 34 lbs.
Capacity, 4 quarts



15-in.
driving
wheel.
9-in.
concave
rear wheel

The No. 300A Seeder is a very efficient plate Seeder intended primarily for the market-gardener and farmer. Quick, easy, and accurate adjustment for all sizes of seed can be made in an instant. Plates provide 39 different holes through which a patented feed-wheel drops seeds in a steady, even row without crushing or jamming. It has removable hopper for emptying excess seeds.

Iron King Combined Seeder and Fertilizer Drill



A sturdy, well-designed machine, but light enough to be pushed by hand. It handles most small vegetable seeds with considerable accuracy, drilling a small, easily regulated amount of commercial fertilizer in the row under the seed. Built by the makers of Planet Jr. Tools. Weight, 48 lbs. No. 45. Price \$29.50.

Iron Age New Model Seed Drill

For many years this tool has been the favorite seeder with thousands of gardeners.



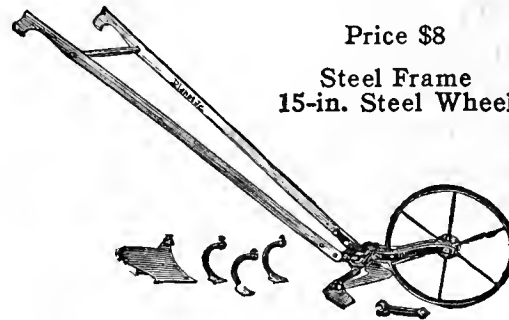
Will sow all kinds of small vegetable seeds. It has exact regulation of seed-discharge by using an eccentric index or indicator, which adjusts the slide for the seed-opening exactly where you want it.

The flow of seed can be instantly stopped by a swinging cut-off, operated by a cord and ring on the handles. Capacity of hopper 2 quarts. Weight, 50 lbs. Price \$11.50.

No. 17 Planet Jr. Single-Wheel Hoe, Cultivator, Rake, and Plow

Price \$8

Steel Frame
15-in. Steel Wheel



Equipment very complete, including one pair of 6-inch hoes for weeding and shallow cultivation, three cultivator teeth for general and deeper cultivation, one plow with land-side for hilling, ridging, and plowing, and one leaf-lifter, which is useful in protecting overhanging leaves and vines. An ideal machine for the family garden.

Planet Jr. No. 16 Single-Wheel Hoe. Same as No. 17 but with one 3-tooth and one 5-tooth rake for fine, close cultivation. Price \$9.

No. 11 Planet Jr. Double-Wheel Hoe, Cultivator, Plow, and Rake

Price, with
attachments as
in cut, \$14.50



A Single and Double-Wheel Hoe in one. Straddles crops till 20 inches high, then works between. Has steel frames and 14-inch steel wheels. The greatest hand-cultivating tool in the world.

Planet Jr. No. 12 Double and Single-Wheel Hoe. Same as No. 11 but less the rakes and one pair of hoes. Price \$11.50.

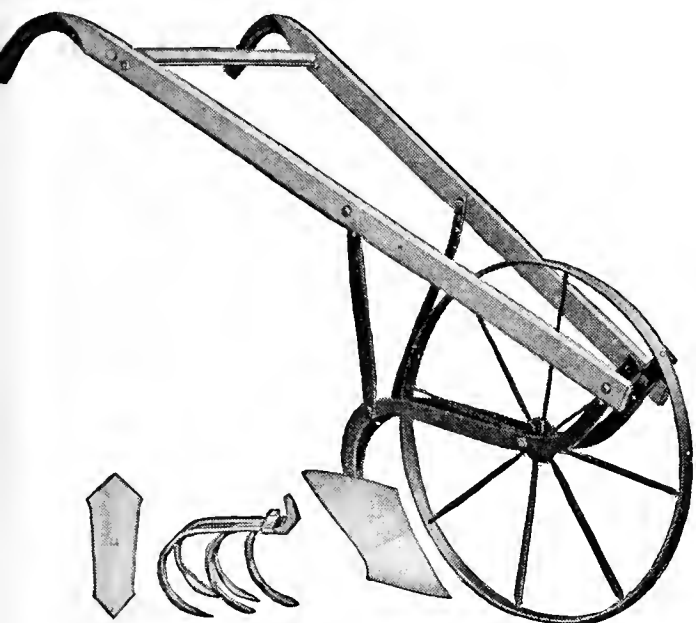
Gem Single-Wheel Hoe and Cultivator

A strong, durable tool that can be used as a Wheel Cultivator anywhere. Equipment consists of a set of 5 slender Cultivator Teeth, one 4-inch and one 8½-inch Scuffle Hoe and a pair of Plows. Weight, 28 lbs. (Not illustrated.) Price, complete, \$6.70.

The Planet Jr. Jiffy Hoe

The handiest little Wheel Cultivator ever made for a backyard garden. It weeds and it cultivates. Equipped with 3-prong Rake (Not illustrated.) Price \$1.60.

For Better Crops and Bigger Yields use Agrico for Gardens, a complete balanced fertilizer. See page 56.



No. 2 Star Garden Cultivator

Star Garden Cultivator

AN ADMIRABLE TOOL FOR THE GARDEN

A very satisfactory Cultivator, Weeder and Mulcher for the home-garden. The frame is made of stiff steel. The long handles give ample foot-space behind the tool and can be raised or lowered to suit the operator's height. The 24-inch wheel has a convex rim which greatly adds to its strength.

The 5-prong Attachment is available separate from the plow and can be used on other of the same general type of garden plows. It cultivates the soil properly and gives the weeds no chance to sprout.

No. 1 Star. With Double-point Blade, Moldboard and 4-prong Attachment. \$3.25

No. 2 Star. With Double-point Blade, Moldboard, and 5-prong Attachment. \$3.50
5-prong Attachment alone 75 cts., postpaid 85 cts.

Star Junior Garden Cultivator

Same type of Cultivator as described above, except wheel is 18 inches in diameter and the handles bolt directly to the wheel axle. (Not illustrated.) Price, with Double-point Blade, Moldboard, and 5-prong Attachment, \$3.10.

Bolens Power Hoe

A Power Wheel Hoe That Everybody Can Afford

A high-class garden tractor that takes the hard work out of cultivating. Made particularly for the home-garden. Has easy-starting 4-cycle motor, positive V-belt drive, patented tool control, rubber handle-grips, and many other features. Can be furnished with lawn-mowing attachment if desired. Built by the pioneers of the garden tractor industry.

Price with cultivator frame and 6 cultivator teeth, \$93.50.

Ask for Circular



\$93.50

Bolens Power Hoe

The Barker Weeder, Mulcher, Cultivator

KILLS WEEDS. CONSERVES MOISTURE

One man with a Barker can do more work, do better work than ten men with hoes. It cultivates and pulverizes the soil, forming a soil-mulch which holds moisture. The underground knife cuts all weed roots, and the reel blades clear the dirt from the knife, making a perfect job of weeding.

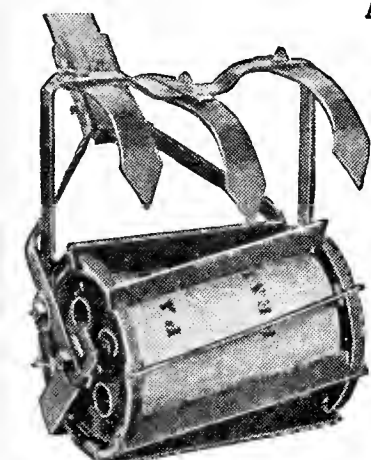
The New Model D Barker has 7¼-inch rugged disc wheels; new patented filler drum, and oscillating leaf-guards. Cutting parts of best-grade steel for its purpose.

No. 9D. An excellent size for general garden work. It cuts a 9-inch strip. Price, \$7.25.

No. 10D. Knife cuts a 10-inch strip. A favorite with gardeners and truckers. Price, \$7.80.

Barker Garden Grower. Has open reel, no filler drum. Price, 10-inch cut \$5.75, 6-inch cut \$5.50.

Ask for special descriptive circular



Model D Barker

Farquhar Riding Cultivator

The All-Purpose, All-Crop Cultivator

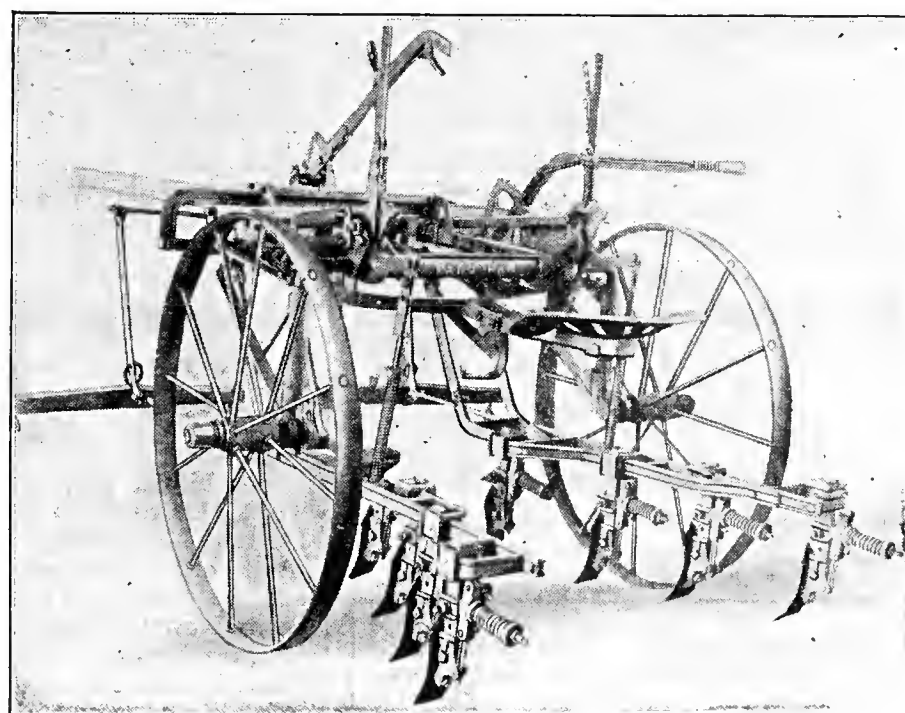
A "farm-tested" tool, embodying superior advantages which make it today's outstanding Cultivator. Costs no more than an ordinary one without these vital superiorities—electrically welded gang and frame, easier draft, easier steering, quick "dodge." Lever-tilted tongue assures even depth whether cultivating up or down hill. Depth levers within easy reach of operator. Gangs are raised by a master lever, which enables depth lever to be retained in position set. Blades are specially tempered alloy steel and are reversible; flat post shovel standards. Unobstructed view of forward gangs from seat while driving. Adjustable seat. Furnished with either pin or spring break shanks. Regularly equipped with fenders. The tread is adjustable to 38-inch, 42-inch, 46-inch, or 50-inch settings. Will effectively cultivate any crop that is planted in rows 30 to 50 inches apart. The wheels are extra strong, 40 inches high, and equipped with dustproof hubs.

No. 156S. 6-shovel; spring-trip. Weight 525 lbs. \$74 50

No. 156P. 6-shovel; pin-trip. Weight 515 lbs. 68 50

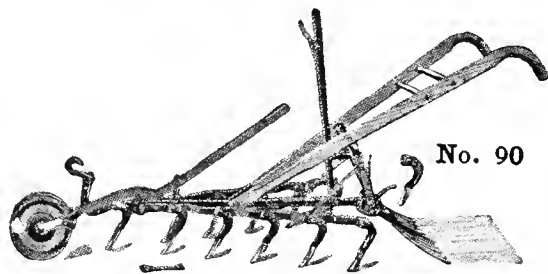
No. 158S. 8-shovel; spring-trip. Weight 550 lbs. 79 50

No. 158P. 8-shovel; pin-trip. Weight 540 lbs. 71 50



PLANET JR. ONE-HORSE CULTIVATORS

Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

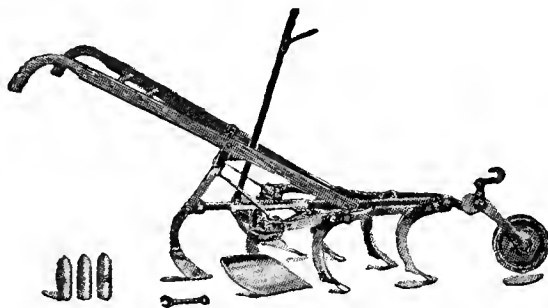


With the Twelve-tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all weeds, stir the soil and fine it as with a garden rake. You widen and narrow as you please between 12 to 32 inches. A favorite with strawberry-growers, market-gardeners, etc.

No. 90. Complete.....\$17 00
No. 90B. Without Pulverizer..... 14 00
No. 90D. Without Pulverizer or Wheel..... 11 50

We have other sizes and styles of Planet Jr. Cultivators than shown in this Catalogue. Write for a Planet Jr. Catalogue.

No. 82 Planet Jr. Horse Hoe and Cultivator



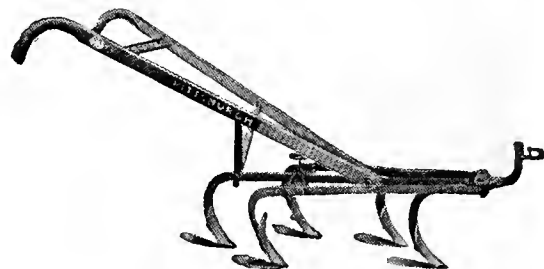
A very popular tool because of the large amount and great variety of work that can be done with it. Finishes rows up to 32 inches apart and works the middle complete at one passage. Zigzag frame is particularly strong and the seven teeth insure fine and thorough cultivation. Price, \$16.

No. 83 Plain Cultivator. Same as No. 82, but with 7 cultivator teeth only and without reversible standards. Price, \$14.

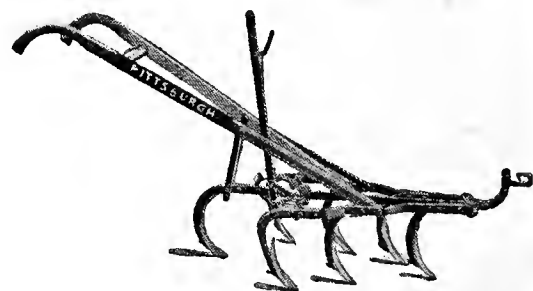
Pittsburgh One-Horse Cultivators

Pittsburgh Cultivators are made of round-edge steel, and are highly finished. The outside stay braces hold the frame solid to any width it may be set.

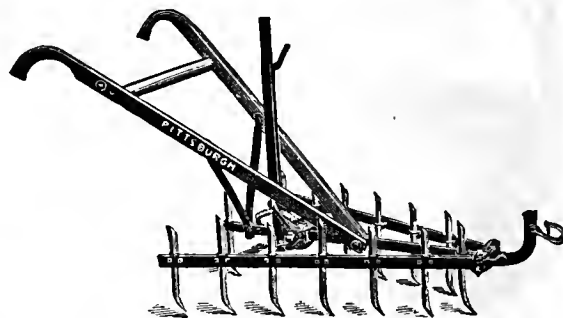
Extra care is taken in the "setting" of the shovels to see that they "face" the work properly, have correct "pitch" and are evenly spaced so that they will cut all the ground.



Pittsburgh 5-Tooth Cultivator with Hand-Wheel Adjustment



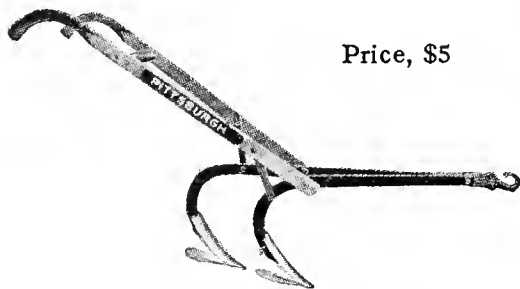
Pittsburgh 7-Tooth Cultivator with Adjusting Lever



Pittsburgh 14-Tooth Cultivator with Adjusting Lever

PITTSBURGH SHOVEL PLOWS

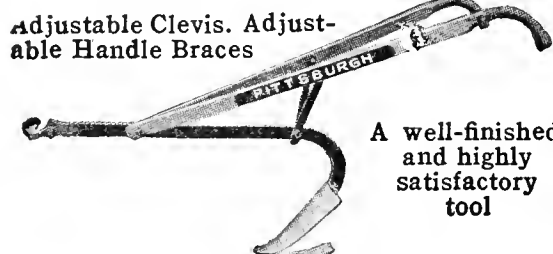
Pittsburgh Steel-Beam Double-Shovel Plow



Price, \$5

Shovels have proper pitch for entering ground right, and making steady running Plow. Beams made of solid steel, rolled, tapering at point.

Pittsburgh Steel-Beam Single-Shovel Plow



Adjustable Clevis. Adjustable Handle Braces

A well-finished and highly satisfactory tool

PRICES

With 12-inch Shovel.....\$4 65
With 14-inch Shovel..... 4 90

We have repair parts for all models of Fordson Tractors in stock

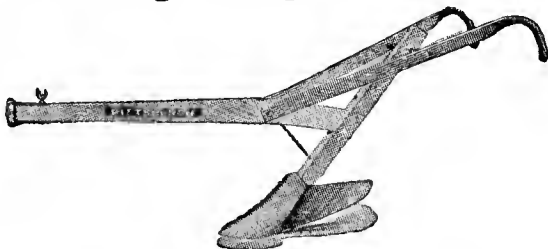
Pittsburgh Steel-Beam Triple-Shovel Plow



Price, \$6.75

The Triple-Shovel Plow is an excellent tool for cultivation of corn and potatoes, or anything that is planted in rows, and is adapted to the wants of both the farmer and gardener. By its use the entire surface of the ground is plowed and still left smooth and level.

Pittsburgh Wing-Shovel Plow



For hilling potatoes and other similar work, this tool will be found highly satisfactory. The wings are adjustable by means of the punched straps or braces that support them, and they can be set to any desired angle. Width of main shovel is 12 inches, and with wings extended to limit, it makes a total width of 26 inches. Price, \$6.



Horse Hoes for 5- and 7-Tooth Cultivators

PRICES

5-Tooth Cultivator with Hand-Wheel Adjustment.....	\$7 00
5-Tooth Cultivator with Adjusting Lever.....	7 90
7-Tooth Cultivator with Hand-Wheel Adjustment.....	8 00
7-Tooth Cultivator with Adjusting Lever.....	8 90
14-Tooth Cultivator with Hand-Wheel Adjustment.....	7 00
14-Tooth Cultivator with Adjusting Lever.....	8 00
Gauge Wheel Extra.....	90
Horse Hoes Extra for 5- and 7-Tooth Cultivator.....	1 60

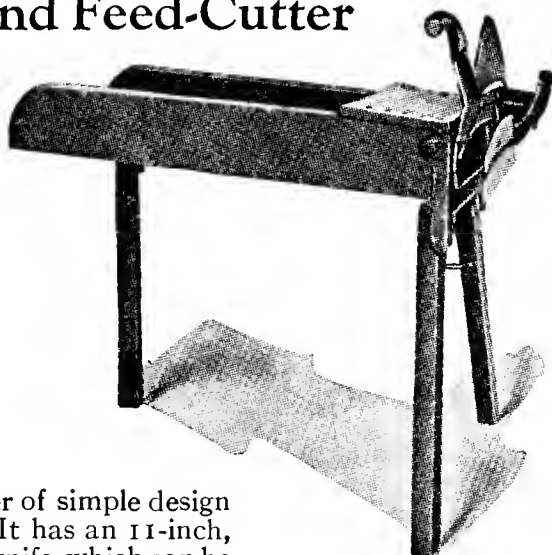
Blizzard Ensilage Cutters



The Blizzard is backed by over 60 years of experience in building Ensilage Cutters. Quality of work, capacity, performance, safety, convenience, and durability are the factors by which the value of an Ensilage Cutter is determined, and the Blizzard meets every one of these requirements. The Blizzard is well known and used and is recommended by all leading farmers.

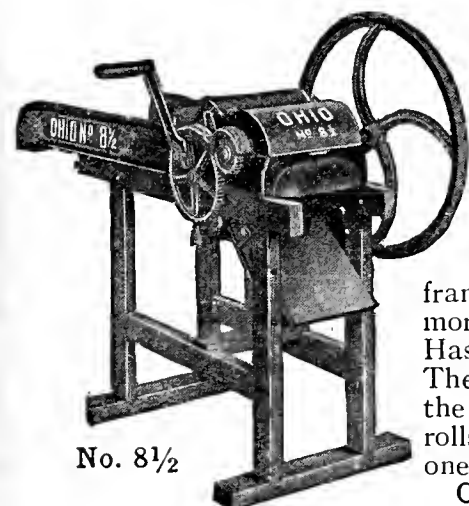
Space prevents enumerating the many features of the Blizzard. If you are interested in an Ensilage Cutter, write for a Blizzard catalogue which not only fully describes the Cutter but has helpful suggestions on ensilage and silo-filling. Be sure to see the Blizzard before you buy an Ensilage Cutter. **Made in Three Sizes. Prices on Request.**

Buch's Hand Feed-Cutter



A durable Cutter of simple design and low in price. It has an 11-inch, tempered, curved knife, which can be adjusted to take up all wear, thus insuring a perfect shear-cut at all times. Has gauge plate adjustable to any length of cut desired up to 3 inches. Cuts either green or dry fodder. Weight, 50 lbs. Price \$7.75.

Ohio No. 8½ Feed-Cutter



No. 8½

The No. 8½ is an excellent Cutter for anyone needing a small, easy-running machine for cutting all kinds of dry or green food for one or a few head of stock. It is well built and reasonably priced. The feed box is 38 inches long and has 25-inch fly-wheel. The framework is of good hardwood mortised, tenoned, and pinned. Has two high-carbon steel knives. The cutter bar is chilled iron and the patented feeding gears and rolls work automatically whether one stalk or an armful is being fed.

Capacity. Cuts one bushel of hay in thirty to forty seconds.

Length of Cut. Cuts ¼-, ½-, ¾-, and 1-inch lengths with two knives or double these lengths with one knife.

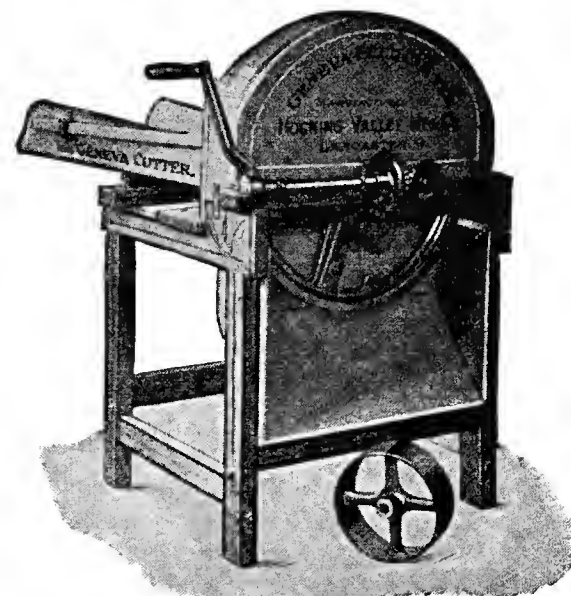
Pulley for Power. Choice of 8- or 10- x 3-inch pulley can be supplied. Weight, 175 pounds.

Price, with 2 knives, \$41; Pulley \$2 extra.

The Geneva Feed-Cutter

KNIFE ON FLY-WHEEL TYPE

The Geneva is adaptable to all kinds of green or dry roughage, hay, corn-stalks, clover, etc. The frame is of hardwood; bottom rails reinforced with steel rods. Joints are mortised and tenoned. The knives are straight, flat, and of the best quality. Made from the best materials throughout by skilled workmen.

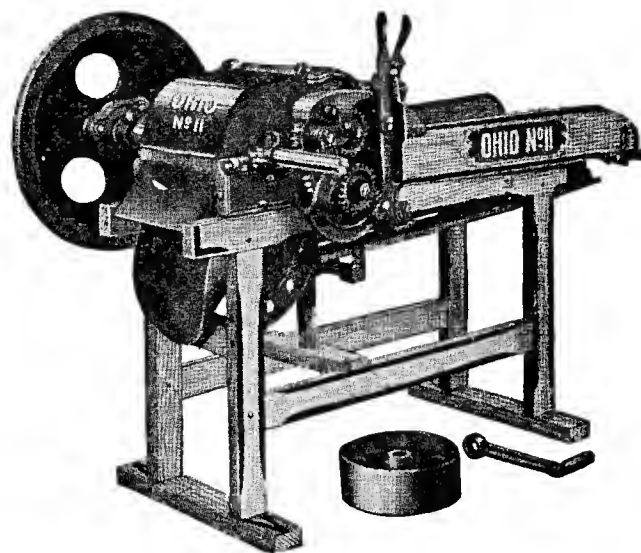


No. 10. Geneva Feed-Cutter

No. 8. Has two 10-inch knives and is intended for hand-use only. It cuts six different lengths, ⅛, ¼, ½, ¾, 1, and 1¼ inches, and the change can be made quickly. Price \$55.

No. 10. Has two 10-inch knives and is intended for both hand and power. It cuts six different lengths, same as No. 8. It is provided with a lever which throws it in and out of gear. Price, with Crank Attachment and Pulley, \$65.80.

No. 12. Has two 13-inch knives and is intended for both hand and power. Cuts six different lengths, ¼, ½, ⅝, ¾, 1, and 1¾ inches. It also has a lever for controlling the rollers. Price, complete with Pulley, \$80.



Ohio No. 11S Feed-Cutter

Used for cutting all kinds of dry or green roughage, corn-stalks, hay, straw, clover, etc. Has patented feeding device and throw-out lever, heavy well-balanced safety fly-wheel. Frame is mortised, tenoned, and pinned; has wide and well-babbitted bearings. Knives are carefully tempered, high-carbon tool steel. Capacity, 2,500 to 3,000 pounds dry feed per hour and 3 to 4 tons per hour on ensilage. Length of cut, ¼, ½, ¾ and 1 inch. Choice of 6-, 8-, 10-, 12-, or 14- by 4-inch face pulley. Power required, 2 to 4 h.p. gasoline. Weight, 440 pounds.

Price, complete, with 4 knives, \$81.50.

Corn Knives • Corn Hooks • Hay Knives

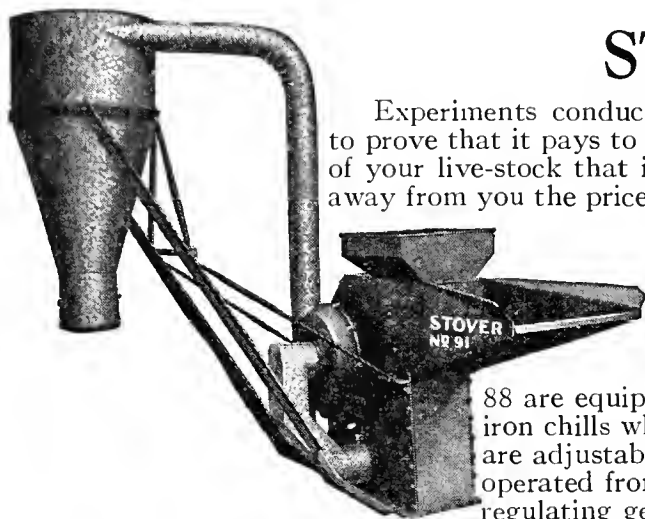
Little Giant Corn Knife. Curved blade, 18 inches long, highest quality steel. Wood handle, oval grip. Price 75 cts.

Black Diamond Corn Knife. Straight blade, 15 inches long, highest quality steel. Flat wood handle. Price 60 cts.

Brooks Corn Hook. Adjustable blade, 13 inches long, serrated edge. Handle 18 inches long. Price 75 cts.

Ney Hay Knife. Has scalloped sickle-edge knife, 18 inches long. Handle adjustable to suit operator. Price \$1.85.

Postage 15 cts. extra



STOVER HAMMER MILLS

Experiments conducted by agricultural experiment stations demonstrate some valuable facts tending to prove that it pays to feed ground grain to live-stock. Every ounce of grain or roughage you place in front of your live-stock that is not in condition to be eagerly consumed and properly digested is steadily taking away from you the price of a Stover Hammer Mill. Your feed-bill is probably one of your most costly items.

Reduce that cost and you have turned a loss into a profit.

The Stover Hammer Mills are constructed of the best materials throughout by a company with over 70 years' experience in manufacturing feed-mills.

These Mills are all of the same general design and construction; are all adapted for doing identically the same class of work, therefore, the principal difference is in the size, capacity, and power required for operation. All Mills except No. 87 and No.

88 are equipped with grain-hopper and with adjustable slide and feed-auger. All models have cast-iron chills which assist materially in reducing grain and increasing capacities. Cyclone supports are adjustable for wagon-box or stacking discharge; blowers are of heavy cast-iron construction, operated from the main shaft. No. 92 is equipped with traveling feed-table, governor, and feed-regulating gears.

Two screens are regularly furnished with each Mill. Additional screens for finer or coarser grinding furnished at additional cost.

	Power Required	Speed R.P.M.	Width of Feed Opening	Screen Area	Capacity* Shelled Corn	Approx. Weight	Price
No. 87.	5 to 8 HP	2900 to 3200	6 in.	140 sq. in.	800 to 1200 lbs. per hour	300 lbs.	\$100.00
No. 88.	12 to 22 HP	2250 to 2500	8 in.	245 sq. in.	2000 to 3000 lbs. per hour	400 lbs.	\$122.50
No. 91A.	20 to 40 HP	2250 to 2450	10 1/4 in.	320 sq. in.	3000 to 5000 lbs. per hour	575 lbs.	\$155.00
No. 93.	40 HP and up	1900 to 2100	14 in.	520 sq. in.	3400 to 5700 lbs. per hour	1050 lbs.	\$300.00
No. 92.	40 HP and up	1900 to 2100	14 in.	520 sq. in.	3400 to 5700 lbs. per hour	1525 lbs.	\$525.00

*Using 3/16-inch screen. Capacities are always governed by grinding condition of grain and power used.

Prices include blower and cyclone and are f.o.b. Factory. Catalogue giving complete details will gladly be sent on request

BOWSHER GRINDING MILLS

WRITE FOR SPECIAL CATALOGUE

These Mills represent the highest achievement in practical feed-mill construction. Ear-corn can be shoveled into the hopper without fear of bridging or choking, in the sizes designed for that work.

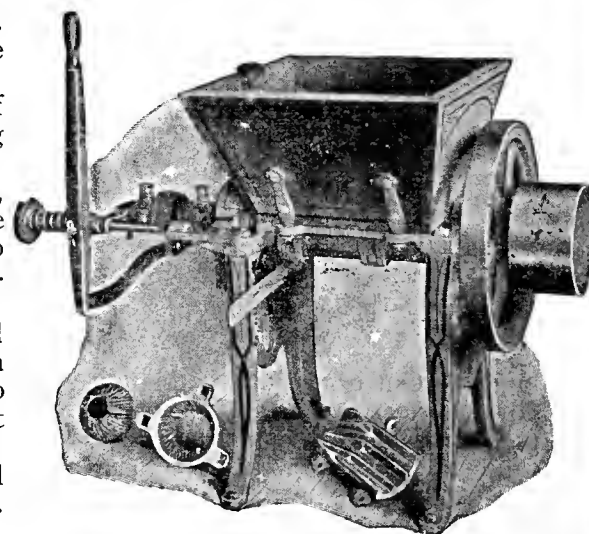
The Cone-shaped Grinders cause very little end-pressure, eliminating chances of hot-boxes, and securing for the Mill many advantages in the way of light-running qualities, large capacity, and economy of operation.

No. 0. It successfully feeds itself on ear-corn as well as on all kinds of small grain, oats, rye, barley, shelled corn, etc. It is equipped with cone-shaped grinders, the wooden relief lever, and many other advantages of the larger sizes. Capacity, 4 to 12 bushels corn on cob per hour. Power required, 2 to 4 horsepower. Without Elevator, \$36.50; with 3-in. short Elevator, \$51.50.

No. 4. The No. 4 will grind ear-corn, with or without shucks, and all kinds of small grain, either alone or mixed with ear-corn, in any proportion desired. Equipped with the cone-shaped grinders, wooden relief lever, divided hopper, etc. Capacity, 12 to 30 bushels corn on cob per hour. Power required, 8 to 12 horsepower. Without Elevator, \$80; with 4-in. Elevator, \$108.

No. 8. Constructed on practically the same principle as the No. 4. Both Mills will handle the same kind of work, but the No. 8 being larger, it has a larger capacity. Capacity, 20 to 50 bushels corn on cob per hour. Power required, 15 to 20 horsepower. Without Elevator, \$120; with 4-in. Elevator, \$148.

For description and prices of smaller Mills, see page 128



No. 0

Harvesting Machinery

Space does not permit detailed description of each machine in this Catalogue. Descriptive catalogue and prices will be gladly sent upon request. The machines we offer are made by old, established manufacturers, are strong and durable and up-to-date in every respect. Be sure to get our prices before you buy. All machines carried in stock. We welcome the opportunity to show them.

Avery Improved Champion Binders. This Binder has to its credit an unmatched record for durability, for easy pulling, and for getting the grain. The force-feed elevator, the special balancing sectors, and the relief rake are exclusive features which make this Binder the champion of them all. Made in 6-foot, 7-foot, and 8-foot cut.

Avery Champion Improved Mowers. The high standing of the Avery Champion Improved Mower is the result of a century's experience in building better farm implements. Besides being light-draft machines, they are very strong, and easy to operate. Made in 3 1/2-foot cut for 1 horse and 5-foot and 6-foot cut for 2 horses.

Avery Champion Improved Self-dump Rakes. Here's a Self-dump Rake you are sure to approve. It is the last word in durability—in convenience—in efficiency. Has an effective locking device and trip found only on the Avery Rake. It is absolutely new in design and principle and is the result of hundreds of experiments and tests. Made in 8-foot, 9-foot, and 10-foot sizes.

Avery Champion Hay Tedders. Much of the feeding and market value of the hay crop may be lost between cutting and gathering. To cure evenly there must be a thorough circulation of air all through the hay. The Champion is designed to accomplish this work most effectively and rapidly. Made in 6 and 8-fork sizes.

Moline Cylinder Hay Loader. Embodied in the Moline Cylinder Hay Loader are all of the improvements in Loader design. It is durably built and will give years of hard service. Steel parts replace castings; pulleys and wheels have replaceable boxings; the frame is of all-steel construction. These are the features that give long life and service. Furnished in 6-foot size and with fore-carriage.

The Bob-White Revolving Hay-Rake. Made of the best selected hardwood timber thoroughly seasoned. The teeth are square and are framed in the heads perfectly solid, making them less liable to come loose and break. 8-foot, 14 teeth, \$17.60; 9-foot, 16 teeth, \$18.75.

Avery Champion Side Delivery Rake and Tedder. This machine represents all the progress which has been made in the design and construction of up-to-date haying machinery. When used as a Rake the cylinder revolves in the direction in which the rake travels, delivering the hay in light, fluffy windrows on the left-hand side. Shifting the lever reverses the cylinder for tedding.

Steel Wire Bale Ties. We make a specialty of furnishing Steel Wire Hay Bale Ties for baling hay, straw, waste paper, etc., to suit all the different sizes and styles of balers. We carry in stock at Pittsburgh for quick shipment the leading sizes of cross-head and single-loop Ties. Prices will be quoted on request.

MYERS HAY TOOLS

Myers Clover Leaf Unloader

Adjustable to Fit All Standard Makes of Steel Track

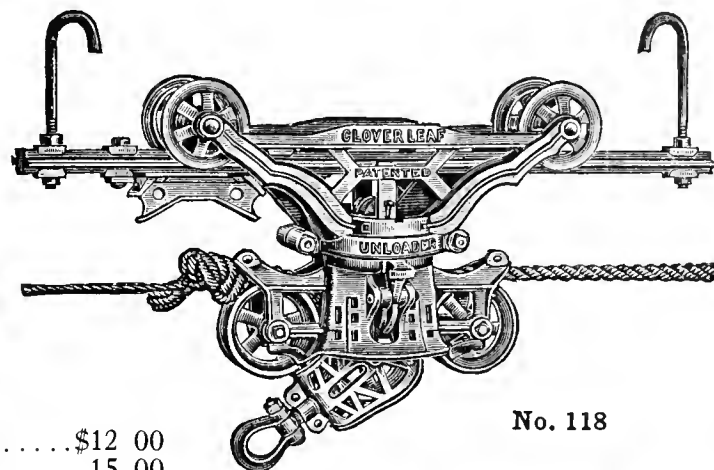
The Myers Clover Leaf Unloader is built of malleable iron throughout. It is heavy and substantially made. Truck is 16 inches long. Has 4-inch sheaves. Track wheels are large and revolve on $\frac{3}{4}$ -inch turned steel axles. Lock is composed of three parts and has no springs. This Unloader has wide-open mouth to receive fork pulley when approaching in any direction. Rope sheaves have longer hub than other Unloaders. Knocker and end stop furnished with each Unloader.



No. 301



No. 302



No. 118



No. 824

PRICES

No. 118.	Unloader. Complete as described above.....	\$12 00
No. 126.	Unloader. Heavier construction. Has 7-inch sheaves. Complete.....	15 00
No. 824.	Double Steel Track, with joint clamps and bolts. Furnished in 6- and 12-foot lengths only. Per foot.....	25 05
No. 301.	Steel Rafter Brackets, as illustrated. Each.....	20
No. 302.	Steel Track Hanging Hooks, as illustrated. Each.....	19
No. 266.	$\frac{3}{4}$ -inch Floor Hooks. Each.....	

Myers Hay Forks

No. 1314. Myers Double Harpoon Fork. Strong and substantial. The flexible chain instead of a fixed cross-bar permits the Fork to enter the hay to a greater depth. \$3.50.

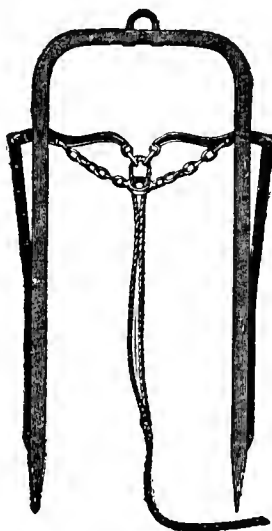
No. 670. Myers Lock-Lever Double Harpoon Fork. Made extra heavy. Has 50 per cent more capacity than ordinary double harpoon forks. \$7.

No. 773. Myers Nellis Single Fork. Constructed of extra-quality material throughout and nicely finished. \$5.50.

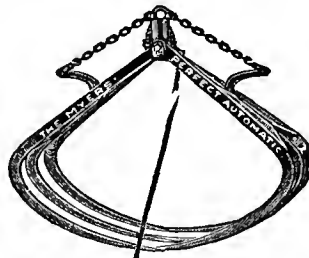
Myers Automatic Grapple Forks. Made of high carbon, heavy spring steel. Closes and locks itself. Trips easily from any direction.

No. 2973. 4-tine Fork \$11.50.

No. 2974. 6-tine Fork \$13.



No. 1314



No. 2974

Myers Pulleys

No. 1120. Has 6-inch wood sheave, 1-inch loose pin, swivel eye. 90 cts. each.

No. 1133. The frame has heavy ribs and swivel eye and follows the rim of the sheave to a point nearly opposite the axle. Has 6-inch hard maple sheave. 80 cts. each.

No. 434. Reed Wood Frame Pulley. Has 1-in. loose pin, self-lubricating wood sheave, with steel hook. 90 cts. each.

No. 466. Not illustrated. Same as No. 434, with swivel eye. 90 cts. each.

No. 1124. Made entirely of malleable iron with iron sheave. This is the Fork Pulley for No. 118 Unloader. \$1.25 each.



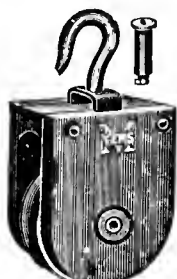
No. 1133



No. 1120



No. 1124

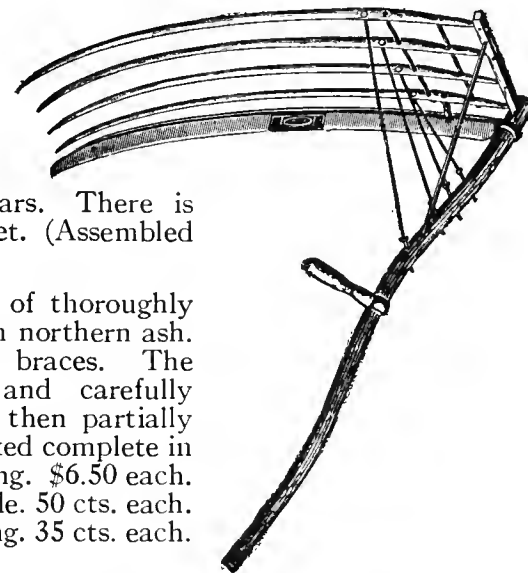


No. 434

Grain Cradles

Westmoreland. The Westmoreland is a hand-made Cradle well known all over western Pennsylvania for many years. There is none better on the market. (Assembled complete.) \$8 each.

Genuine Schwob. Made of thoroughly seasoned, second-growth northern ash. Has adjustable wire braces. The Cradle is assembled and carefully balanced by hand and then partially knocked down and packed complete in strong carton for shipping. \$6.50 each. Extra Fingers, handmade. 50 cts. each. Extra Fingers, oil-sprung. 35 cts. each.



Rope

We handle the best grades of Manila and Sisal Rope; especially adapted for hay-fork outfits and other hard work where a strong, serviceable Rope is required.

H. & A. "Anchor" Manila Rope. Guaranteed to be stronger than Government Standards. It is carefully spun from extra-long, high-grade Manila fiber. It will long outwear ordinary Rope, will resist water and weather, and remain pliable and easy to work with under most adverse conditions.

SIZES AND PRICES PER FOOT

	$\frac{1}{4}$ -in.	$\frac{3}{8}$ -in.	$\frac{1}{2}$ -in.	$\frac{5}{8}$ -in.	$\frac{3}{4}$ -in.	$\frac{7}{8}$ -in.	1-in.
Manila.....	$\frac{3}{4}$ c.	$1\frac{1}{4}$ c.	2c.	4c.	$4\frac{3}{4}$ c.	$6\frac{1}{4}$ c.	$7\frac{1}{2}$ c.
Sisal.....	$\frac{1}{2}$ c.	1c.	$1\frac{1}{2}$ c.	$2\frac{1}{2}$ c.	3c.	4c.	5c.

H. & A. "Star Brand" Binder Twine

"Star Brand" Twine is evenly spun from the best fibers, is of full yardage and strength, and is used from coast to coast by farmers who claim it is never cut by insects.

It is guaranteed to have the yardage claimed for it, to have ample strength for binding purposes, and to work satisfactorily in any properly adjusted binder.

We furnish both Sisal and Standard. 500 feet to the pound.

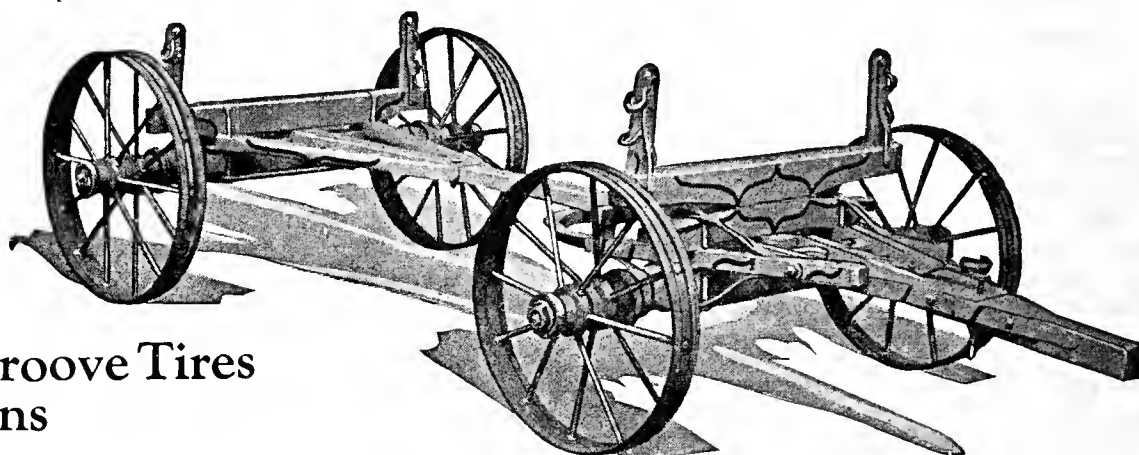
Write for prices, specifying quantity wanted



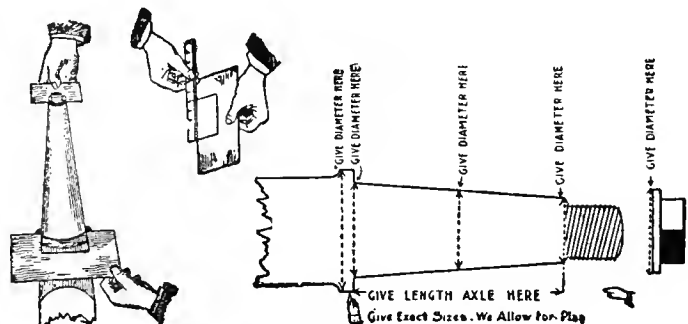
The Keystone Steel Wheel Farm Truck

The Keystone is carefully made of the best material—it is strong, convenient, and handy in every way. Axles are hickory fitted with $3\frac{1}{4}$ x 10-inch cast skeins. Gear parts are clipped, not bolted. Trussed axles. Round angle steel front hound, reinforced and strongly braced. All gear parts, with the exception of the axles, are made of select, thoroughly seasoned oak. Steel wheels are standard pattern with deep grooved tires with spokes staggered and forged solid in both tire and hub. Track 5 feet, center to center of tires. Bolsters 42 inches wide between standards. Standards 10 inches high, mortised into bolster. Wheels, 28-inch front, 32-inch rear, 4 x $\frac{3}{8}$ -inch grooved tire. Capacity, 4,000 pounds, for ordinary farm use.

Price, with gear brake, \$62. Doubletrees and Neckyoke, extra, \$4.50. (Brake and Doubletrees not shown in illustration.)



Steel Wheels with Deep Groove Tires to Fit Old Wagons

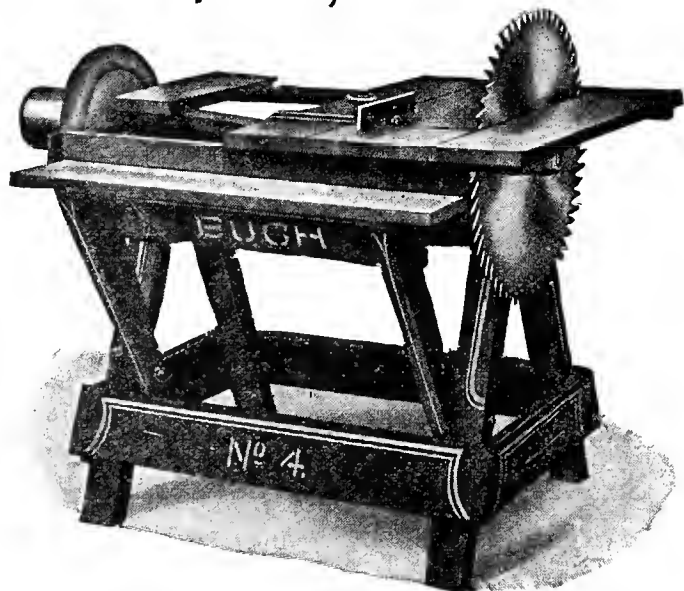


A set of Steel Wheels like those on the Keystone Farm Truck will turn an old wagon into a low, handy farm truck. We can furnish wheels of any height and tire size to fit any skein or axle. Popular heights and tire sizes are quoted below.

	3 x $\frac{1}{2}$ -in. or 4 x $\frac{3}{8}$ -in. tire		3 x $\frac{1}{2}$ -in. or 4 x $\frac{3}{8}$ -in. tire
26 in. height.....	\$5 35	32 in. height.....	\$6 50
28 in. height.....	5 65	34 in. height.....	6 85
30 in. height.....	6 00	36 in. height.....	7 35

Other heights and tire sizes quoted on request. In ordering, give measurements as shown in illustration. Prices are for one wheel and are f.o.b. factory.

No. 4 Pony Wood Saw



No. 4 Wood Saw with Ripping Table

This Saw is especially built for high power. Suitable for 3 to 6 horse-power engine. With 18-inch blade it will cut round wood 8 inches thick. Frame will admit 20-inch blade. Mandrel is 3 feet 5 inches long, $1\frac{7}{16}$ -inch diameter, fitted for blades with $1\frac{3}{8}$ -inch hole. Balance wheel is 12-inch diameter, weighing 30 lbs. Boxes $3\frac{1}{2}$ inches long; pulley, 5-inch face by $4\frac{1}{2}$ -inch diameter. Table securely hinged to frame. Weight 110 lbs. Price, with 18-in. blade, \$18.50. Ripping Table, as shown, \$4.25 extra.

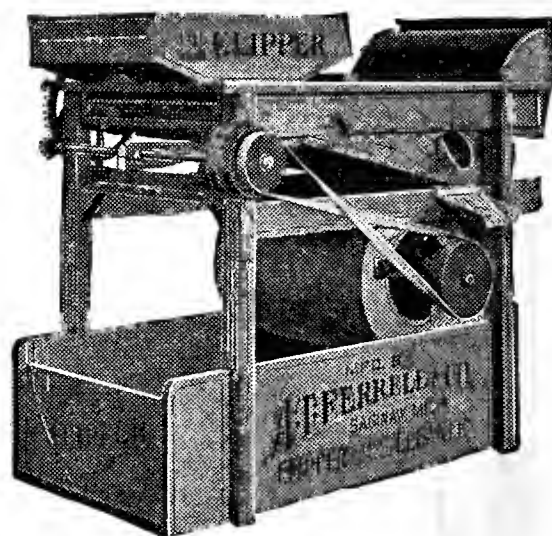
Catalogue and prices of larger sizes on request.

Clipper Grain and Seed Cleaner

The Clipper has no worthy competitor. The screen outfit is very complete for the work required and contains screens for wheat, oats, barley, rye, clovers, alfalfa, timothy, millet, flax, peas, beans, cowpeas, soy beans, grading seed corn, cleaning clover containing buckhorn, plantain or ripple, cleaning timothy seed containing pepper grass and sorrel, also separating corn from oats.

No. 1-B Clipper is a farm-size hand-mill that will clean 20 bushels of seed wheat per hour, or 10 bushels of clover or timothy seed per hour. Twelve screens, 19 inches wide and $22\frac{1}{4}$ inches long, go with the No. 1-B Mill. Price \$42. Power Pulley, 6-in. diam., \$1 extra.

The No. 2-B Clipper does exactly the same work as the No. 1-B. Its capacity per hour is 25 bushels grain and 15 bushels of grass seed. The screens (12 in number) are 6 inches wider than the No. 1-B screens. No. 2-B can be run easily by hand for cleaning grass seed, but for cleaning grain some kind of power should be applied— $\frac{1}{2}$ horsepower is sufficient. Price, with 6-in. diameter Power Pulley, \$47.50.



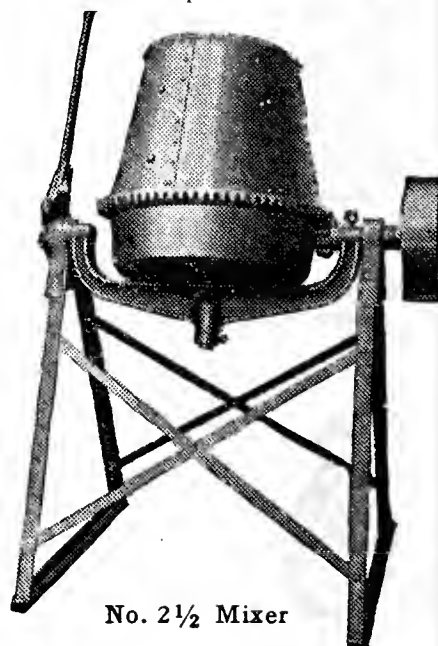
The No. 1-B Clipper Seed Cleaner

The Jumbo Concrete Mixer

Meets the requirements of the farmer or contractor who already has a power plant of one horsepower or over. It has a capacity of $2\frac{1}{2}$ cubic feet (one wheelbarrow load) and can be operated by one man but it will keep a crew of four men busy. It is easy to load and easy to dump.

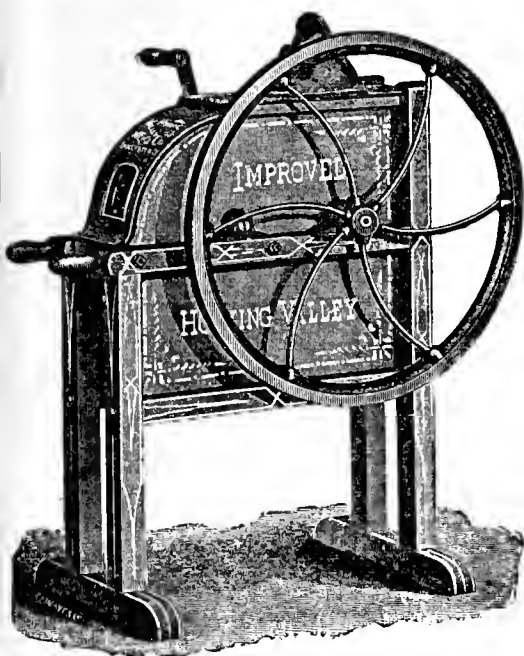
A rugged reliable Mixer for the farmer and contractor. No. $2\frac{1}{2}$. Price \$30.

Prices on larger outfits quoted on request. Ask for special circular



No. $2\frac{1}{2}$ Mixer

Hocking Valley Corn Shellers



Hocking Valley Corn Shellers are manufactured of the best materials obtainable, by skilled workmen. Frames are made of hardwood and are unusually rigid. All bearings bored and reamed to a machine fit. Shelling and feed wheels machine-fitted and keyed to shaft. Every part fits perfectly. Made in two sizes, one-hole and two-hole. Capacity, one-hole Sheller 20 to 25 bushels per hour, two-hole 35 to 40 bushels per hour.

One-Hole Sheller

With fan.....\$18 50
Without fan..... 17 00
Feed-table, extra.. 1 25
Clamp pulley,
extra..... 1 25

Hocking Valley Two-Hole Corn Sheller. With crank, fan, feed-table and pulley, \$42.

Black Hawk Corn Sheller

A wonderfully fast and easy-running Sheller. Instantly fastened to barrel or box by two large strong clamps with wing nuts. For illustration, see page 128. Price \$3.25, postage 30 cts. extra.

Banner Root-Cutter



No. 20

These machines will cut and prepare beets, carrots, turnips, mangels, and all other roots and vegetables for feeding cattle, horses, sheep, and hogs.

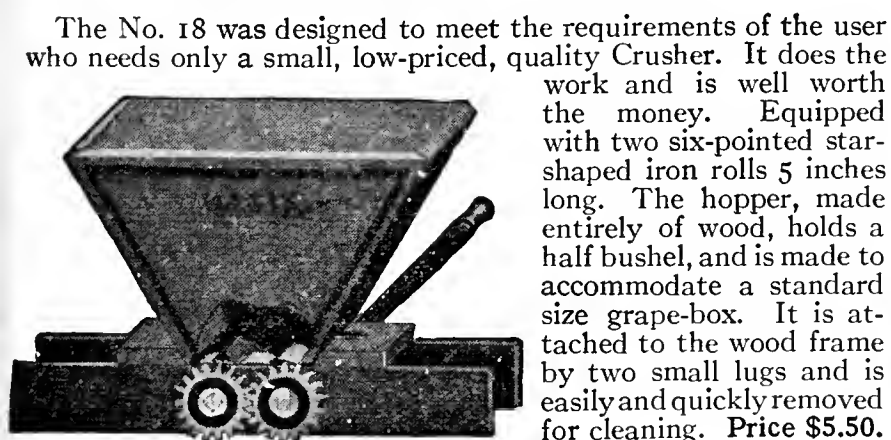
No. 20. Operates by hand. Capacity 30 bushels and up an hour. Equipped with iron grating to sift soil from roots before reaching knives. Dependable in every respect. Price \$21.

No. 16. Supplied with balance-wheel, pulley, and crank, so it can be used by power or hand as desired. Capacity: By hand, 30 to 50 bushels per hour; by power, 75 to

100 bushels. Price complete, Pulley and Crank, \$34.

For prices of Root-Cutters for poultry, see page 128

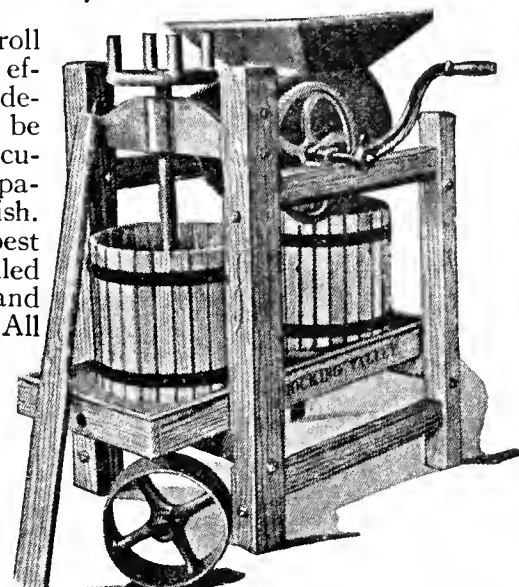
No. 18 Oasis Fruit Crusher



The No. 18 was designed to meet the requirements of the user who needs only a small, low-priced, quality Crusher. It does the work and is well worth the money. Equipped with two six-pointed star-shaped iron rolls 5 inches long. The hopper, made entirely of wood, holds a half bushel, and is made to accommodate a standard size grape-box. It is attached to the wood frame by two small lugs and is easily and quickly removed for cleaning. Price \$5.50.

Hocking Valley Cider Mills

Equipped with wood-roll grinding cylinder—the most efficient all-purpose grinding device made. Guaranteed to be entirely satisfactory in execution, ease of operation, capacity, durability, and finish. Manufactured from the best materials obtainable by skilled workmen. Bearings bored and reamed to machine fit. All cross rails reinforced with steel tie rods. Hardwood slats riveted at both ends, not nailed. All joints mortised and tenoned. Bottom pressing head mortised, tenoned, and gained. Special Acme Thread, die-cut steel screw. Bearings bolted to side rail. Laminated hardwood cylinder, grain opposed. Crucible steel serrated knives. Mills furnished with plain tubs at prices named.



Bantam Mill. 1 tub....\$25 50 | **Medium Mill.** 2 tubs..\$44 60
Junior Mill. 2 tubs.... 36 40 | **Senior Mill.** 2 tubs.... 59 00

Hocking Valley Cider Mills with Iron Grinding Cylinder

Bantam Mill. 1 tub....\$22 75 | **Medium Mill.** 2 tubs..\$39 10
Junior Mill. 2 tubs.... 32 70 | **Senior Mill.** 2 tubs.... 51 60
Power Pulley for any of these Cider Mills, \$2.30 extra.

The Oasis Fruit Press

In the design, construction, and selection of materials for the Oasis Presses we offer a product superior in every respect to any hand Fruit Presses on the market. Frames are of selected, well-seasoned hardwood, finished in the natural color of the wood. Cross-heads are made of heavy iron and are much stronger than those used on most Presses of large dimensions. The tub has beveled slats, properly spaced and securely riveted to wide steel-hinged bands.

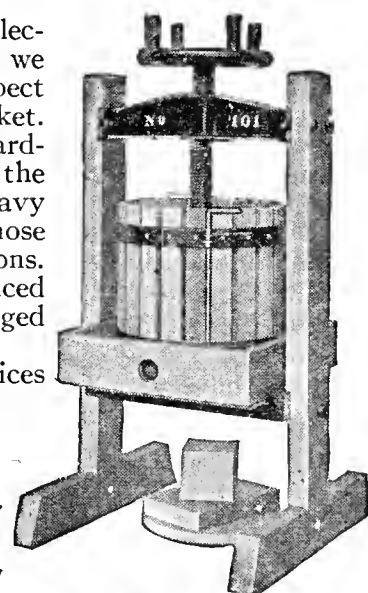
Furnished with hinged tubs at prices named.

No. 101. Tub 11 1/2 x 11 1/4 in. Capacity 1/2 bus. \$10.50.

No. 202. Tub 14 1/4 x 12 1/4 in. Capacity 3/4 bus. \$13.60.

No. 303. Tub 17 3/4 x 15 1/2 in. Capacity 1 1/2 bus. \$22.25.

No. 404. Tub 23 1/4 x 20 in. Capacity 3 1/2 bus. \$34.50.

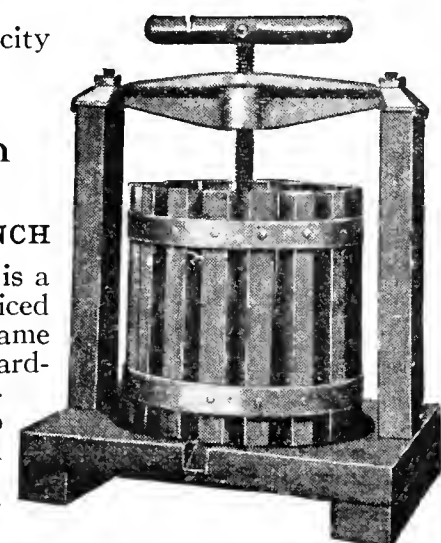


No. 0 Oasis Wooden Fruit Press

FOR USE ON TABLE OR BENCH

The No. 0 Oasis Fruit Press is a small, durable, reasonably priced wooden Press for home use. Frame is made entirely of selected hardwood; cross-head, semi-steel; die-cut steel screw; hardwood tub with extra-wide steel bands and beveled edged slats.

Tub 9 x 9 1/4 in. Capacity about 8 quarts. Price \$4.25.



Tilley Ladders

They are the most convenient orchard Ladders ever produced for trimming trees and picking fruit. Made very light and strong. The best that can be produced.

Single Ladders

OPEN TOP

10-foot.....\$3 25	20-foot.....\$7 00
12-foot..... 3 90	22-foot..... 7 60
14-foot..... 4 50	24-foot..... 9 00
16-foot..... 5 25	26-foot..... 9 75
18-foot..... 6 25	28-foot.....11 75

POINTED TOP

13-foot.....\$5 00	21-foot.....\$8 25
15-foot..... 6 00	25-foot.....10 60
17-foot..... 6 75	27-foot.....11 50
19-foot..... 7 50	

Point included in above measurement.

Extension Ladders

OPEN TOP

24-foot, extends to 21 feet.....\$11 00
26-foot, extends to 23 feet..... 12 00
28-foot, extends to 25 feet..... 12 75
30-foot, extends to 27 feet..... 13 75
32-foot, extends to 29 feet..... 14 50
34-foot, extends to 31 feet..... 16 00

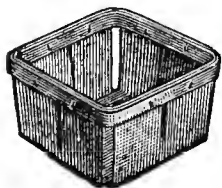
Omega Tripod Step-Ladder

Particularly adapted for fruit-picking and for use on uneven ground. Light, strong, rigid, broad-based. Easy to stand on; easy to move; folds up snugly.

6-step....\$3 35	10-step...\$5 50
8-step.... 4 45	12-step... 7 00

A first-class, well-made article. All flat steps. The two lower are supported by and rest on rounds which tie, support and thoroughly brace the main Ladder.

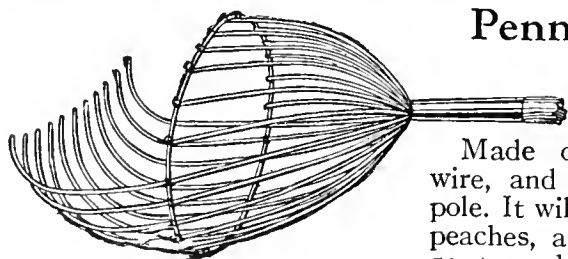
Tilley Ladders are neither painted nor stained and the purchasers can see just what they are buying.



FRUIT PACKAGES

We make a specialty of Fruit Packages, all kinds and sizes to suit the gardening and fruit-growing trade in western Pennsylvania, among which are the following: Berry Baskets, Diamond Market Baskets, Grape Baskets, Stave Baskets, and Till Baskets.

When you are in the market for Baskets, please ask us for prices.



Pennsylvania Fruit-Picker

Made of heavy galvanized wire, and easily adjusted to a pole. It will gather apples, pears, peaches, and all similar fruits. 50 cts. each, postage 10 cts. extra.

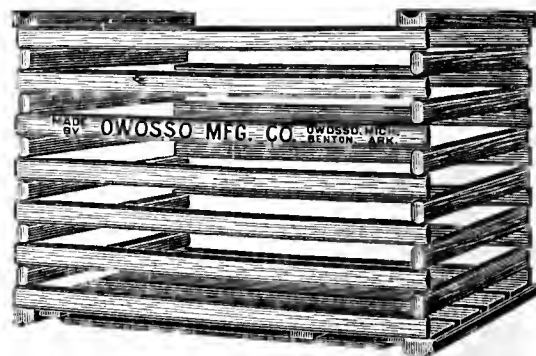
Facing Forms, Liners, and Caps

We can furnish Facing Forms, Liners, and Caps used for packing apples and other fruits. Made in half-bushel and bushel sizes. Circular and prices on request.

Owosso Folding Fruit and Vegetable Crate

Made strong and durable. Used extensively for handling apples, potatoes, onions, and tomatoes from the fields; also for storage purposes. They stack up as high as desired and provide the right amount of ventilation.

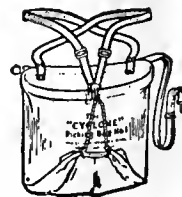
Size, 15½ inches wide, 17¾ inches long, 13½ inches deep. Holds one heaping bushel. 60 cts. each, prepaid 75 cts.; \$5.25 for 10, \$22.50 for 50, \$43 per 100, prepaid.



Cyclone Picking Bags

Especially adapted for picking apples and other fruits. Made from "A" grade Duck with two adjustable straps and a steel band to keep the mouth of the Bag wide open. To empty, simply release the rope from the hook and fruit will flow gently from the bottom of the bag. No. 1. \$1.90.

No. 10. Made from heavier material throughout. \$2.25.



ROOFING AND PAINTS

Barrett Everlastic Mineral-Surfaced Roofing

Exceptionally high-grade Roll Roofing for use on steep-roofed buildings of all types. Quickly applied, it makes a weather-tight, durable, fire-safe roof.

Each roll contains 108 square feet, with galvanized nails and cement for proper application. Width of roll, 36 inches. Weight, 90 pounds. Colors: Emerald-Green, Blue-Black, Spanish Red. \$2.75 per roll; 10-roll lots, \$2.65 per roll.



Barrett Vitex Mineral-Surfaced Roofing

A Mineral-surfaced Roll Roofing at low cost. Each roll contains 108 square feet, with nails and cement. Width, 36 inches. Weight, 75 pounds. Colors: Red, Green, Blue-Black. \$2.45 per roll; 10-roll lots, \$2.35 per roll.

Barrett Panamoid Smooth-Surfaced Roofing

Made of good-quality felt and saturant, finished with corrugations on both sides. Nails and cement packed with each roll.

Medium (45 lbs.), \$1.70 per roll; Heavy (55 lbs.), \$2.05 per roll; Extra-Heavy (65 lbs.), \$2.45 per roll; 10-roll lots, 10 cts. per roll less.

Barrett Tomahawk Smooth-Surfaced Roofing

Meets the need for a good, low-priced Roll Roofing for general use on buildings and for temporary protection for cement and other building materials. Nails and cement packed with each roll.

Light (35 lbs.), \$1.25 per roll; Medium (45 lbs.), \$1.45 per roll; Heavy (55 lbs.), \$1.70 per roll; 10-roll lots, 10 cts. per roll less.

Sherwin-Williams Liquid Roof Cement

A combination of pitches, oils, and long asbestos fiber for repairing all types of roofs. Apply it with a roofing-brush. Comes in black. Gal. can 75 cts., 5-gal. can \$2.75, 30-gal. drum \$14.10.

Sherwin-Williams Elastic Roof Cement

For patching large holes, joining and relining gutters, downspouts, drain-pipes, chimney flashings, etc. Should be applied with a trowel. Black. Lb. 15 cts., 5 lbs. 55 cts., 10 lbs. \$1.

Sherwin-Williams Commonwealth Barn Paint

For barns, sheds, roofs, silos, fences, etc., a bright red. Works easily; has good spreading capacity. One gallon will cover about 500 square feet one coat. Qt. 70 cts., gal. \$1.90, 5 gals. \$8.75.

The Sterling Grindstone



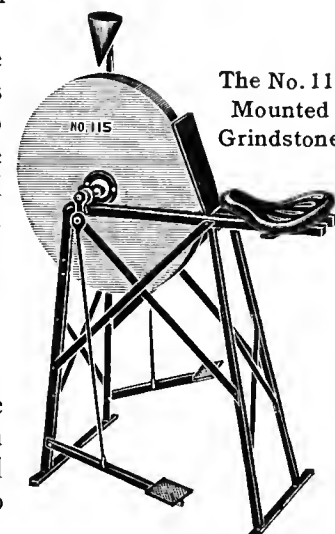
The Sterling Grindstone

The Sterling is, beyond question, the best mounted Grindstone on the market. It is strong, easy-running, very substantially made, and cannot fail to give the very best service and satisfaction. It has a double-treadle frame, embracing bicycle features. The frame is of $1\frac{1}{16}$ and $1\frac{1}{4}$ -inch heavy steel tubing, very heavily and securely braced. All rods and bolts are threaded, and there are no cotter pins or other loose parts. Provided with large, comfortable seat and clothes protector. Cranks and crankshaft are fitted with improved ball-bearings, fully encased to keep out dirt. The shaft is cold rolled steel and the shaft bearings are hardened steel, to prevent wear. All castings are malleable iron. Mounted with a Cleveland Stone, 19 to 22 inches diameter, $1\frac{3}{4}$ to $2\frac{1}{4}$ inches thick. \$11.

The No. 115 Mounted Grindstone

A GOOD BALL-BEARING GRINDSTONE AT A POPULAR PRICE

The No. 115 Mounted Grindstone is designed to meet the demand for a low-priced Grindstone. The frame is constructed of 1-inch by $\frac{5}{8}$ -inch angle steel substantially braced, is fitted with ball-bearings on shaft and crank, and a cold rolled-steel shaft which is detachable. It has a double treadle and is furnished with comfortable seat and clothes protector. Mounted with a good Ohio stone, 20 inches diameter, $1\frac{3}{4}$ to 2 inches thick. Weight of stone about 50 pounds. \$7.65.

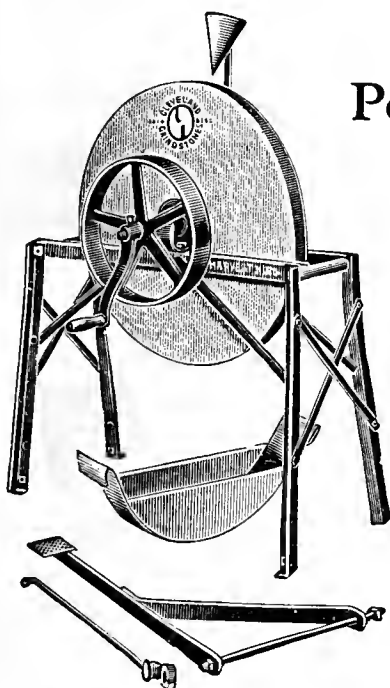


The No. 115 Mounted Grindstone

Harvest King Power Grindstone

For Farm Use

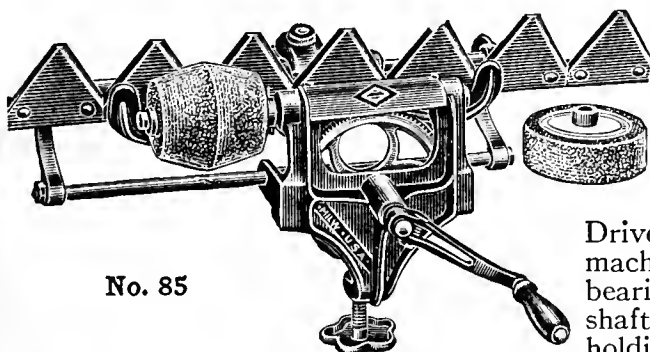
The Harvest King Roller-bearing Power Grindstone is designed to meet the needs of the farmer who desires a Grindstone to be operated by a gasoline engine. The frame is of heavy angle steel, $1\frac{1}{4} \times 1\frac{1}{4} \times \frac{1}{8}$ in., strongly braced. Equipped with high-grade, selected Cleveland Grindstone, 24 inches in diameter and 2 inches thick. Pulley 12 in. diameter x $2\frac{3}{8}$ inches. Heavy steel roller bearings. Weight, complete, about 140 pounds. Shipped knocked down but easily set up in a few minutes. Price, complete, with hand-crank, pulley, drip-cup, trough, and treadle attachment, \$14.75.



Harvest King Power Grindstone

Luther Farm Grinder

Designed especially for the farmer who wants a good quality hand-power sickle and tool-grinder. Substantial construction; ball-bearing thrust eliminates friction and end-play in shaft. Clamps on mower wheel or bench.



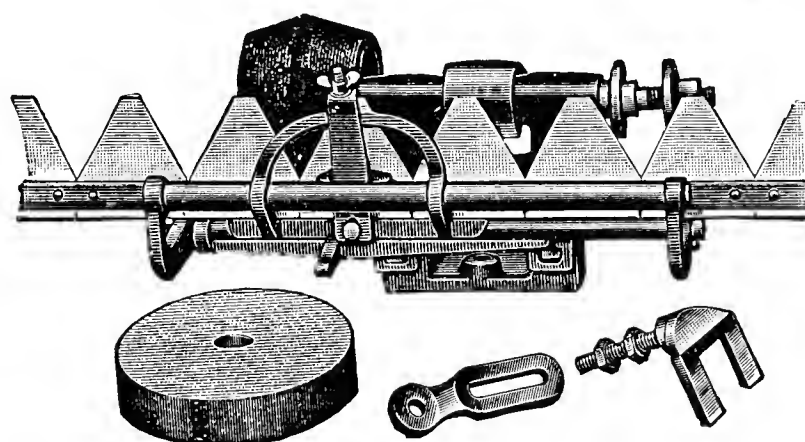
No. 85

Drive-gear and pinion machine cut. Ball-bearings on wheel-shaft. Special sickle-holding attachment; easy and simple to grind mower knives. Grinds six sections before reclamping. Holds any length sickle-bar. No. 85. With $4\frac{1}{2} \times 1\frac{1}{2}$ in. Medium Dimeo-Grit Tool-Grinding Wheel \$9.20, postpaid.

Carborundum File



Mighty handy for the farmer and gardener. Cuts quickly and freely, and gives better, cleaner edge than the steel File, and in less time. For sharpening mower sections and practically any edged farm and garden tool. No. 57. \$1, postage 10 cts. extra.



No. 307 Luther Power Grinder

Luther Power Farm Grinder

A sturdy Power Grinder suitable for sharpening farm edge tools, axes, chisels, mower sections, etc. May be driven with $\frac{1}{4}$ h. p. motor or from line shaft. Frame made to run belt from above, below, or the side. Equipment includes one medium $6 \times 1\frac{1}{4} \times \frac{5}{8}$ -inch Dimeo-Grit wheel, one $5\frac{1}{2} \times 3\frac{1}{2} \times \frac{5}{8}$ -inch double bevel face sickle cone, and work rest sickle attachment. No. 307. \$10.60. Disc harrow attachment 50 cts. extra.

Luther Foot Power Grinder

An easy-running and portable foot-power Sharpener that adequately takes care of all farm tool sharpening as well as light shop and garage work when belted power is not available. Frame is of all-steel channel construction and strongly braced. (Not illustrated.)

No. 258. With double bevel face sickle cone, one 6×1 -inch medium grit tool wheel and sickle holder attachment. \$15.40.

Scythe Stones

Carborundum Brand Scythe Stones. Made in just the right grit to give a proper edge. No. 190. 10 in. long, 25 cts.

No. 191. 12 in. long, 35c. No. 192. 10 in. long (heavy), 30c.

English Scythe Stones. Talacre Pattern. 12-in., 50 cts. each.

Baked Milan Scythe Stones. German Pattern. $9\frac{1}{2}$ -in., 10c. each.

Carborundum Brand Lawn Mower Sharpener

Simple, practical, efficient—no need for removing the mower wheels.

No. 41. For mowers 12 to 15 inches wide. \$0 50

No. 42. For mowers 16 inches in width and wider. 65

(Any of above by parcel post, 10 cts. each extra.)

POST-HOLE DIGGERS

Standard Earth Augers

Standard Earth Augers are "standard" because they will do the most work in the shortest time with the least labor, and are made of the highest grade material. It is the only Auger made having movable blades which open to discharge contents. Will dump sticky clay with ease. Can be instantly adjusted to bore many different-sized holes. In fact, it has no equal for any kind of earth-boring. It bores seven different-sized holes—8, 9, 10, 11, 12, 13, and 14 inches in diameter and $3\frac{1}{2}$ feet deep. The stem can be fitted with pipe extension to bore extra-deep holes or wells. \$5.60 each, postpaid.

Universal Post-Hole Digger

The best and most popular Digger on the market. Has high carbon steel blades. Will dig a hole 34 inches deep. Length overall, 4 ft. 10 in. No. 1. \$3.

Perfection Post-Hole Digger

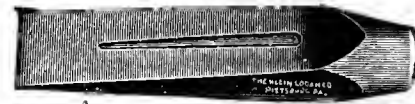
Works in all kinds of soil, dry sand, gravel, shale, etc. Blades and shanks forged from one-piece high carbon steel. Handle, 48 in. long. No. 34. \$1.75.

Tamping Head Steel Digger

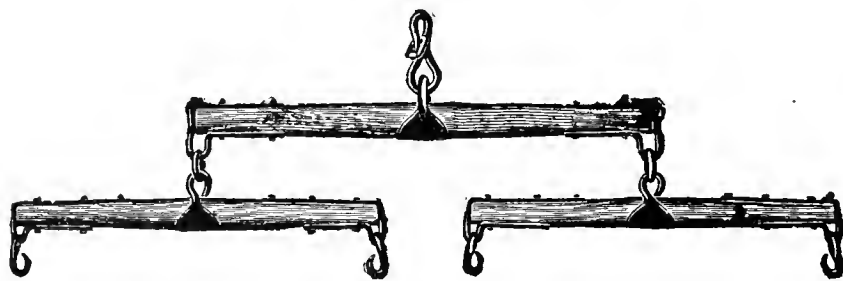
All-steel, long and wide cutting blade with large tamping head made of 1-inch round steel; length over all 5 feet, 9 inches. \$2.85 each.

Wood-Chopper's Wedge

No. 82. Round head; Truckee Pattern. 3-lb. 55 cts. each; 4-lb. 65 cts.; 5-lb. 75 cts.



Truckee Pattern



Wood Plow Doubletree Set

No. 652. Doubletree $3\frac{1}{4}$ x 38 inches with $\frac{3}{4}$ -inch steel loops, singletrees $2\frac{3}{4}$ x 30 inches with $\frac{1}{2}$ -inch steel loops. The above set made from second-growth hickory, painted red. Complete \$5.25.

Wood Wagon Doubletree

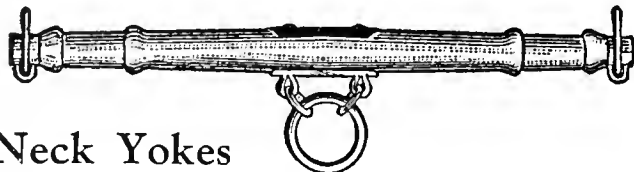
Doubletree 2 x 4 x 48 inches. Singletrees $2\frac{5}{8}$ x 34 inches. Painted red, varnished and striped. (Not illustrated.) No. 710. Per set \$3.85.



Agricultural Set

No. 691. Complete hitch for land-rollers, hay rakes, tedders, mowing machines or any implement where flat doubletree is used. Painted red. Doubletree and singletrees \$1.75.

No. 320. Neck yoke (not illustrated) extra if wanted, 90 cts.



Wagon Neck Yokes

Made from second-growth hickory; center ring 3-inch diameter.

No. 303. $2\frac{5}{8}$ -in. x 42 in. long, \$1.65.

No. 305. 3-in. x 48 in. long, \$2.50.



Wood Plow and Cultivator Singletree

Full-length loop pattern strap. Ring in center

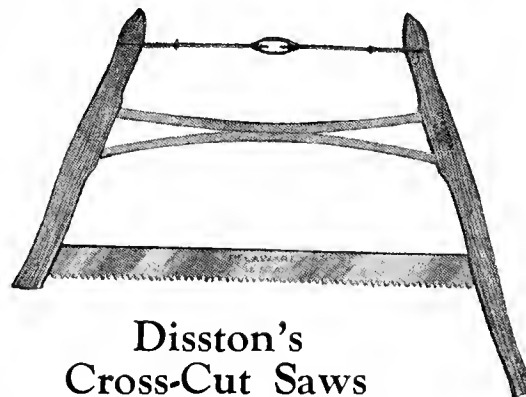
No. 1880.	$2\frac{3}{8}$ x 26-inch.....	\$0 85
No. 1881.	$2\frac{3}{8}$ x 28-inch.....	90
No. 1882.	$2\frac{3}{8}$ x 30-inch.....	95

Breast Yoke

MADE FROM
HICKORY



No. 631. $1\frac{3}{4}$ inches x 22 inches long, \$1.



Disston's Cross-Cut Saws

No. 254. Two-man. Has two cutting teeth to one raker; width of blade, $3\frac{1}{4}$ in. Furnished with handles. Price, 5-ft. blade, \$3.50; 5½-ft. blade, \$3.75; 6-ft. blade, \$4.

No. 554. One-man. Has two cutting teeth to one raker. With supplementary handle. Price, 3-ft. blade, \$3.50; 3½-ft. blade, \$4.

No. 333. Disston Wood Saw

Hardwood frame, double braced, 30-inch Champion tooth blade. Painted red. \$1.60, postpaid \$1.75.

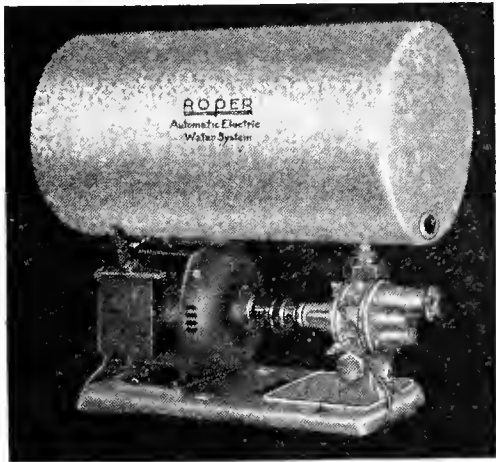
Roper Rotary Shallow-Well System

Not Recommended for Sandy Wells

For reliable pumping service from cisterns and open wells, this System can't be beat! It is a compact, efficient unit that will give you years of Dependable service. Completely automatic—starts and stops itself. Equipped as illustrated—ready to install. Will lift water 22 feet and force it under pressure to all outlets. Made in two sizes—250- and 500-gallon per hour capacity.

Fig. No.	Capacity Gals. Per Hour	Inlet Opening	Outlet Opening	Size Motor	Tank Size Gals.	Shpg. Wt. Lbs.	Price
880	250	3/4 in.	1/2 in.	1/4 H.P.	6	74	\$41.35
881	500	1 in.	3/4 in.	1/2 H.P.	10	115	79.20
880TA	250	3/4 in.	1/2 in.	1/4 H.P.	42	153	57.45
881TA	500	1 in.	3/4 in.	1/2 H.P.	42	173	99.00

COMPLETE CATALOGUE OF ROPER WATER SYSTEMS
Showing larger outfits, on request



Wood Pumps

Size 6 x 6 in.; 3 1/2-in. cylinder

	Unlined	Porcelain Lined	Unlined	Porcelain Lined
6-ft....	\$9 75	\$12 00	8-ft...\$11 25	\$14 00
7-ft....	10 50	13 00	10-ft...13 50	16 00

Tubing for above pumps, 4 x 4 in., in 8-, 10-, and 12-foot lengths, 33 cts. per ft.

Couplings for 4 x 4-in. tubing. \$1.10.

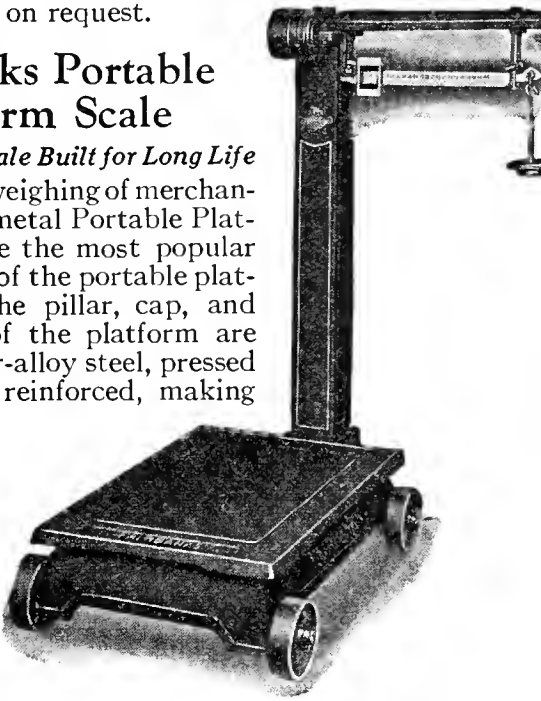
In ordering give depth from top of platform to bottom of well. Prices on other sizes of Wood Pumps quoted on request.

Fairbanks Portable Platform Scale

An All-metal Scale Built for Long Life

For general weighing of merchandise, these all-metal Portable Platform Scales are the most popular and adaptable of the portable platform type. The pillar, cap, and center panel of the platform are made of copper-alloy steel, pressed to shape and reinforced, making very rigid and rust-resistant units. All bearings are self-aligning. The loops, bearings, nose irons and weights are rust-resistant, assuring long life with sustained accuracy. The beam is made of non-corrosive aluminum alloy. Every farmer should have one of these scales.

- No. 1128. Capacity 500 lbs.....\$22 80
- No. 1124. Capacity 1,000 lbs.....26 10



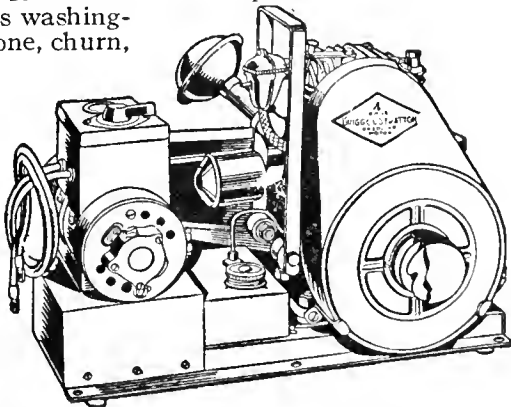
Briggs & Stratton Power Charger

The outfit consists of a Briggs & Stratton 4-cycle, air-cooled gasoline motor and a specially designed generator, with ample overload capacity. It produces current for dependable 6-volt electric light up to 200 watts.

A pulley grooved for standard V-belt is provided to drive small equipment such as washing-machine, pump, grindstone, churn, etc., direct from motor.

It is substantially built with moving parts and wiring fully enclosed. Measures only 14 inches high, 12 inches wide, and 20 3/4 inches long. Weight, 83 pounds. Equipped with carrying handle. Price, fully equipped, \$68.50.

Ask for circular



Iron Pumps

Rex Deep-Well Lift Pump

Our new pattern anti-freezing, constant-flowing Deep-Well Pump, fitted with reversible handle and improved compound handle rest. While the Pump is designed for deep wells, yet it can be used in cisterns or wells as deep as 150 feet. Furnished with either 2 1/2- or 3 x 10-inch cylinders at the following prices:

- With iron cylinder.....\$10 50
- With brass-lined cylinder..... 12 60
- With brass body cylinder..... 13 65

If wanted complete with 1 1/4-inch galvanized pipe and 3/8-inch galvanized steel rod, add to above prices 23 cents per foot for depth of well.

New Fountain Double Acting Force and Lift Pump

The New Fountain is the simplest and most efficient deep-well pump on the market. It has a double air-chamber which enables the pump to throw an absolutely solid stream, just like a hydrant. Has smooth bore cylinder and brass valve seat; made to face the front or side by simply loosening set screw at top. It will go in hole as small as 4 3/4 inches. The upper cylinder is brass lined. Anti-freezing.

Furnished with either 2 1/2- or 3 x 12-inch cylinders at the following prices:

- With brass-lined cylinder.....\$18 50
- With brass body cylinder..... 19 40

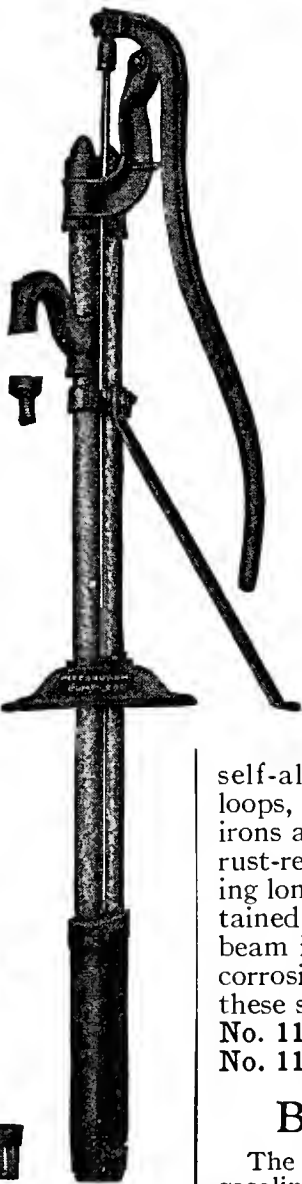
If wanted complete with 1 1/4-inch galvanized pipe and 3/8-inch galvanized steel rod, add to above prices 23 cents per foot for depth of well.

Pitcher Spout Pump

Has smooth-bore cylinder and brass valve seat, with revolving top, allowing lever to be placed at any desired position, and may be used successfully in cisterns or wells as deep as 25 feet.

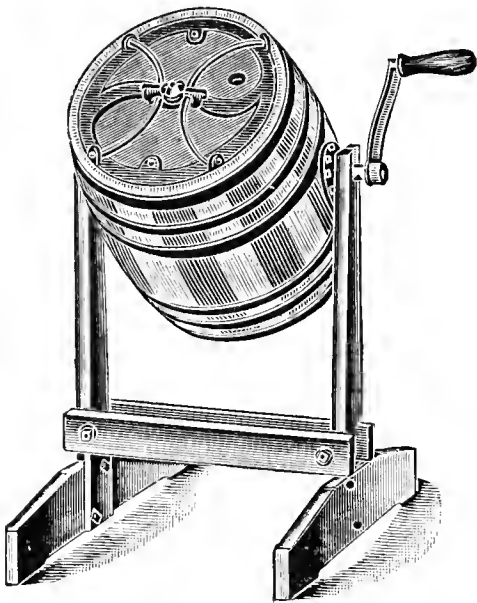
PRICES

- No. 2. 3-inch cylinder, polished iron, \$2.25; brass lined, \$3.90.
- No. 3. 3 1/2-inch cylinder, polished iron, \$2.65; brass lined, \$4.40.
- Galvanized Pipe. 1 1/4-inch, cut to length and threaded, 17 cts. per ft.



Dairy Equipment and Supplies

The Favorite Barrel Churn



Made of the best quality of kiln-dried white oak, with galvanized iron rim in head.

The frame is substantially built and made of hard wood.

It works easily and is cleaned quickly, having no dashers or paddles. The churning is done by revolving the Churn, which agitates the cream and separates the butter from the milk.

	Total Capacity	Price
No. 0.	6 gallons.....	\$8 00
No. 1.	10 gallons.....	9 00
No. 2.	15 gallons.....	10 00
No. 3.	20 gallons.....	12 00
No. 4.	25 gallons.....	14 00
No. 5.	35 gallons.....	16 00

These Churns can be furnished with power pulleys, also in larger sizes. Prices on request.

Taylor Electric Barrel Churn

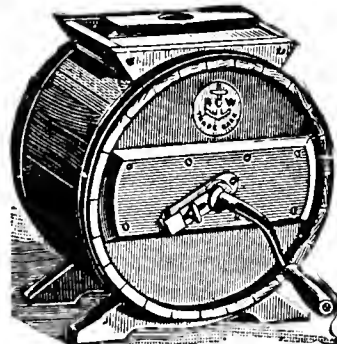
The Taylor is constructed of selected oak; the frame is of hardwood reinforced with metal braces and equipped with metal bearings. Standard, heavy-duty, splash-proof type, 110-volt A.C. motor, complete with cord and plug and V-type belting.

No.	Total Capacity	Price	No.	Total Capacity	Price
10.	10 gallons.....	\$40 00	25.	25 gallons.....	\$55 00
15.	15 gallons.....	45 00	35.	35 gallons.....	67 50
20.	20 gallons.....	47 50	50.	50 gallons.....	90 00

Churning capacity of all Barrel Churns about half their total capacity

Improved Cedar Cylinder Churn

The Improved White Cedar Cylinder Churn has a double dasher, and the crank is locked to the Churn with a clamp and thumb screw, which prevents leakage. Lock cannot break. The top is large, and dasher easily removed. Hoops are of galvanized iron and will not rust. The best Churn in use. All castings are heavily tinned. Churning capacity is given—actual capacity of Churn is slightly more.



No.	Churning Capacity	Price	No.	Churning Capacity	Price
No. 1.	3 gallons....	\$4 25	No. 3.	7 gallons....	\$5 90
No. 2.	4 gallons....	5 00	No. 4.	10 gallons....	6 75

White Cedar Staff Churns

These popular Staff and Dash Churns are made of selected, seasoned Virginia white cedar, and are bound with electric welded galvanized wire hoops. Fitted with handsome covers and hardwood staffs and dashers. Carefully made, sweet, hygienic, and very light. Measurement given is height of Churn.

No.	Churning Capacity	Price
16-in.	3 gallons.....	\$1 75
18-in.	4 gallons.....	1 90
20-in.	5 gallons.....	2 25
22-in.	6 gallons.....	2 65
24-in.	8 gallons.....	3 35
26-in.	10 gallons.....	3 85



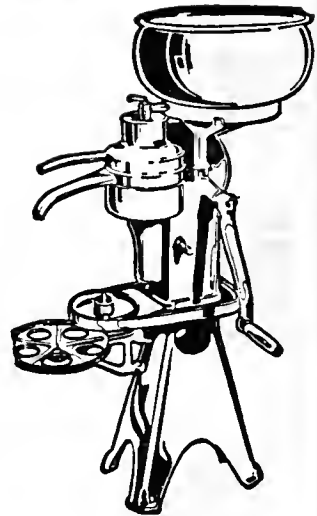
Vega Cream Separator

Gets All the Cream, Easy to Clean, Durable and Efficient

The Vega will give many years of trouble-free service. It is the only Cream Separator made that guarantees the lugs on the discs will not break, crack, or come off for 10 years, and that you will not need to add an extra disc to the bowl for 5 years. Vega bowls are perfectly balanced from top to bottom, lighter in weight and turn easier than any other Separator, size for size.

Vega discs are unnumbered and can be put on in any order. The lugs are electrically spot-welded on the discs, and all tinware is made of the finest grade of specially treated Swedish steel, properly tinned, and found to be the best acid-resisting metal for Cream-Separator use. All moving parts are enclosed in a dust-proof housing, and the lubrication is positive and automatic.

Vega is simple in construction, good appearing, with fewer moving parts than other Separators, which means long wear. It is easy to clean and easy to keep clean. The bowl can be taken apart and assembled in from 2 to 4 minutes.



A Size and Model Vega Best Fitted for Your Needs

Model A3.	150 lbs. and up per hour.....	\$26 00
Model B3.	225 lbs. and up per hour.....	32 00

Above are table models without stands.

Model F3.	350 lbs. and up per hour.....	\$62 50
Model G3.	450 lbs. and up per hour.....	82 50
Model L3.	650 lbs. and up per hour.....	97 50
Model M3.	900 lbs. and up per hour.....	110 00

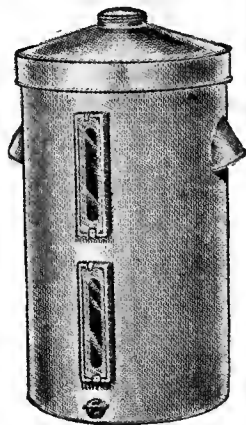
Above are hand-powered and complete with stands.

Models G, L, and M can be converted into power drives by attaching either a gasoline engine or electric motor at very low cost.

SEPARATOR OIL. Prepared especially for hand separators. 1-qt. can 55 cts., 1-gal. can \$1.65.

Star Cream Separator

Made of the best bright charcoal tin plate and constructed with a deep concave bottom, allowing every particle of milk to be drawn off before the cream reaches the faucet without their being mixed. The milk thus flows downward out through a crooked neck or elbow faucet located underneath the gauge. It is operated by introducing cold water or ice into the milk—about equal parts. Has reversible combination cover, strainer, and aerator.



No.	Capacity	Quarts	Price	No.	Capacity	Quarts	Price
0.	1 cow	24...	\$3 40	2.	3 to 4 cows	68..	\$4 75
1.	1 to 2 cows	48...	4 60	3.	6 to 8 cows	118..	6 00

Standard Glass Churns

You can make butter for home use in from 8 to 10 minutes. Easy to clean. Also used extensively for mixing cake ingredients, beating eggs, whipping cream, and mixing salad dressing. Has heavy flint-glass jar, 4-blade hard maple dasher, and heavily plated screw-top. Strainer in top permits pouring off the buttermilk without removing the top. Replacement jars can be furnished.



	Postpaid
2-quart.....	\$1 60
4-quart.....	2 50
6-quart.....	3 00
8-quart.....	3 75



Security Milk Cans

Ohio Pattern. Made of Follansbee forge steel with an extra-heavy coating of pure tin. Welded side seam.

	Neck	Each	Doz.
5-gal.	6 $\frac{3}{16}$ -in.	\$4 45	\$48 60
8-gal.	7 $\frac{1}{4}$ -in.	5 25	58 25
10-gal.	7 $\frac{1}{4}$ -in.	5 50	61 20

Umbrella Cover for Ohio pattern in place of Sunken Cover, add 20 cts. per can. Half-Dozen Cans at Dozen Rate.

Name-Plates for Milk Cans. Brass Name-Plates soldered on can, limit three lines, twenty letters per line, 15 cts. each; doz. or more, \$1.40 per doz.

Lisk Milk Cans

Charcoal tin body and bottom; one-piece retinned breast. Malleable ears and heavy tinned wire bail.

	Each	Postpaid	Doz.
P-2504. 1 gallon	\$1 20	\$1 35	\$13 00
P-2508. 2 gallons	1 50	1 65	16 25
P-2512. 3 gallons	1 90	2 10	20 50
P-2520. 5 gallons	2 65	2 85	28 50



Owen-Illinois Milk Bottles

Owen-Illinois Milk Bottles are made of the highest strength glass obtainable and are guaranteed to conform with state laws.

	Doz.	1/2 Gross	Gross
Quarts	\$0 90	\$4 40	\$8 25
Pints	75	3 45	6 35
Half-Pints	65	2 95	5 35
Quarter-Pints	65	2 95	5 35

Five-gross lots 25 cts. per gross, 10-gross lots 50 cts. per gross, and 25-gross lots 75 cts. per gross less than above prices.

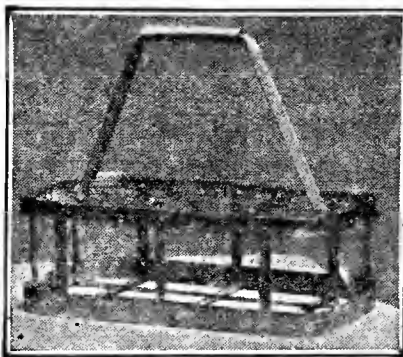
Name-Plates \$2.50 for each size. One plate free on orders for 5 gross; 2 plates free on orders for 10 gross. If customer has lettered bottles we will duplicate the Name-Plates without charge provided a sample bottle or rubbing of the lettering is submitted. All lettered Bottles f.o.b. factory, with freight allowance of 50 cts. per gross. Plain Bottles f.o.b. cars, Pittsburgh.



Perfection Milk Bottle Basket

Perfection Baskets are made up of plain annealed bands, galvanized to prevent rusting. They have extra-heavy top and handle made to last a lifetime.

	Each	Postpaid	Doz.
6-quart.	\$1 25	\$1 35	\$13 50
8-quart.	1 35	1 45	14 50



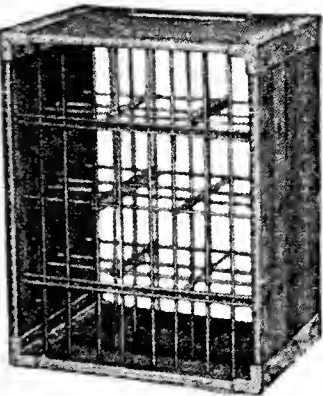
Armor-Klad Bottle Cases

Armor-Klad Cases are strongly built and of exceptionally fine construction. They will stack with all standard Cases.

They have lapping corners of heavily galvanized iron, and angle-iron supports for the dividing wires. All the wires extend clear through the wood slats and the corner irons are riveted, inside to outside. The bottom runner is dovetailed into the bottom slat and is further held in place by the corner irons.

No. 103. 12-qt. case	\$2 35	No. 302. 20-half-pt. case	\$2 35
No. 202. 20-pt. case	2 30	No. 303. 30-half-pt. case	2 45

10 cases or more, 10 cts. per case less. Prices are not prepaid.

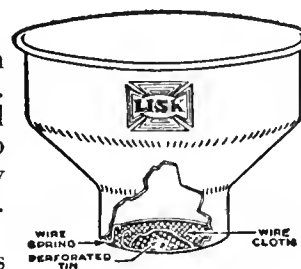


Milk Strainers

No. 1934. Seamless, body and foot drawn from one piece of metal and retinned. Wire cloth soldered on bottom and equipped with reversible wire band, to hold cloth or to act as a stand. Sanitary and easy to clean. Capacity, 4 quarts. \$1.10, postage 10 cts. extra.

No. 1834. Same design and capacity as No. 1934, but not retinned. 65 cts., postage 10 cts. extra.

No. P19512. Seamless and sanitary soldered. Furnished with bottom cut out and equipped with removable flat perforated tin disc, convex perforated tin disc, and spring wire. Cotton pads are used between the discs and are furnished at extra charge. Capacity, 12 quarts. \$1.65, postage 25 cts. extra.



No. P19512

Banco Milk Filter Discs

Made of thinly rolled, non-absorbent cotton especially for the purpose. Filters quick, clean, and uniform.

Plain Discs, 6-in. diam., pkg. of 100, 35 cts.; pkg. of 300, 95 cts.; 6 $\frac{1}{2}$ -in. diam., pkg. of 100, 45 cts.; pkg. of 300, \$1.25.

Thread-faced Discs, 6-in. diam., pkg. of 100, 60 cts.; pkg. of 300, \$1.70; 6 $\frac{1}{2}$ -in. diam., pkg. of 100, 65 cts.; pkg. of 300, \$1.85. Postage 10 cts. extra on package of 300.

Lisk Dairy Pails

No. 7212. 12-qt., sanitary solder... \$1 15

No. 7214. 14-qt., sanitary solder... 1 25

No. 7612. 12-qt., seamless... 2 60

No. 7614. 14-qt., seamless... 2 90

No. 14212. 12-qt., Strainer Pail... 1 75

No. 14214. 14-qt., Strainer Pail... 1 85

The Seamless Pails are absolutely sanitary. No seams or rivets in the entire pail. Heavily retinned. Welded ears. Heavy steel band on bottom. Heavy steel bail. Complies with all dairy laws.



Hardwood Butter Bowls

Made from selected Michigan hardwood; paraffin wax finish. Extra deep; heavy rimmed. 15-in. \$1.35; 17-in. \$1.75; 19-in. \$2.

Butter Moulds

These Moulds are made of the best grade of sugar maple. Made in 1-pound size.

No. 20. Round Pattern. Sheaf Design or Cow Design. 45 cts.; postpaid 55 cts.

No. 10. Oblong Pattern. Made with mortise and tenon corner joints. Extremely durable. 40 cts.; postpaid 50 cts.

WOOD BUTTER LADLE. Made from one piece of hard maple. 5-in. by 10-in., 20 cts.; postpaid 25 cts.

Osborn Dairy Brushes

Hand Bottle Brushes

No. 86. Prepared stiff bristle, 2 $\frac{3}{4}$ -in. diam., 6 in. long; handle 9 $\frac{3}{4}$ in. long; wire-wound. 95 cts., doz. \$10.25.

No. 72. Black China bristle. Same size as No. 86. 75 cts., doz. \$8.

No. 124. Stiff horse hair, 2 $\frac{3}{4}$ -in. diam., 6 $\frac{3}{4}$ in. long; handle 9 in. long; wire-wound. 70 cts., doz. \$7.50.

For Machine Washer

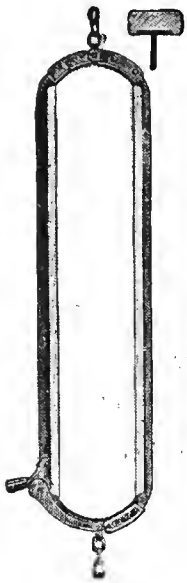
No. 125. Turbine. 65 cts., doz. \$7.

No. 100. Center Brush for cleaning outside of bottles. \$1.

No. 101. Outside Brushes for cleaning inside of bottles. 70 cts. Complete Set of 3 Brushes, \$2.15.

Palmetto Milk Can Brush

No. 08. Palmetto fibre; width of face 5 in., length of face 9 $\frac{1}{2}$ in.; solid block. Made of an excellent grade of durable fibre, very full, with flaring wings. 55 cts., doz. \$6.



Ney Dairy Barn Equipment

Ney No. 1 Stanchion

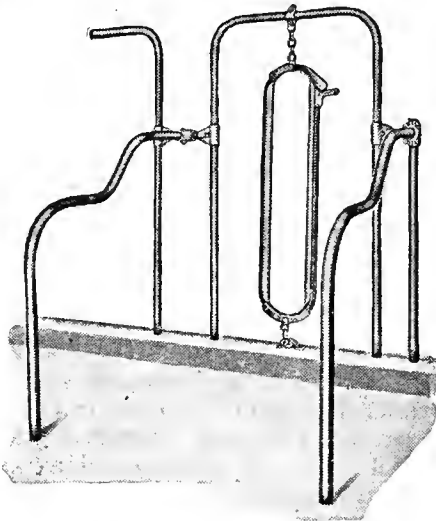
Unquestionably the best Stanchion ever placed on the market. Made without springs, the folding, over-center toggle locks it securely when closed and ties it together at the top when open. Frame high carbon T-bar steel with seasoned hardwood lining. Other parts malleable iron, connecting links of steel. Width adjustable, 7 to 8½ inches. \$4.40 each.

Ney No. 5 Stanchion

In general somewhat similar to the No. 1, but lighter, non-adjustable in width, and has no malleable iron parts. Frame U-bar, lined with hardwood. A good low-priced Stanchion. (Not illustrated.) \$2.75 each.
No. 5 Unlined. \$2.40 each.

Ney No. 75 Arch Type Stall

A strong, practical Stall. One-piece arch units are joined together in the Stall-row by cross-braces to which the Stall partitions are connected. Made of stiff, high-quality steel pipe or tubing, 1½ inch outside diameter; fittings are steel and certified malleable iron. Height of unit over all, 5 feet 8 inches; width, center to center, 30 inches. Stalls may be varied in width from standard, 3 feet 6 inches, up to 4 feet by using cross-braces of different lengths. Price without Stanchion, \$7; with No. 5 Stanchion, \$9.75; with No. 1 Stanchion, \$11.40. Extra End Section, \$4.



Ney Water Bowls

The best and most ruggedly constructed Water Bowl ever offered to the dairy industry. Made of special close-grained cast-iron with a minimum of working parts. Has removable solid brass valve. Nose lever will stand tilted up to simplify removing chaff, etc., from Bowl. No. 15, \$3.35 each. No. 4, Part brass valve, \$2.75 each.

Ney Litter Carriers

- No. 1. Has eight roller-bearing track wheels, worm-driven hoisting gear, and extra-strong galvanized steel tub. Price, with 8- to 10-bus. tub, \$58; with 10- to 12-bus. tub, \$60.
No. 2. Practically same as No. 1 Litter Carrier, except it has only four 4½-inch track wheels instead of eight. Price, with 8- to 10-bus. tub, \$50; with 10- to 12-bus. tub, \$52.

Improved Champion Milk Cooler

A perfect aerator, removing all feed-odors and animal heat while the milk is being cooled. It reduces the temperature of the milk instantly nearly to the temperature of the cooling medium and is as easily cleaned as a pail. Takes only ½-inch stream of water to operate, but can be used without running water. The milk flows over the cooling surface in an even film and cooling is sure and certain.

The following sizes will take care of the milk as fast as drawn with the average number of milkers. Get one large enough.



Capacity milk receiver	Size of dairy	Takes care of	Price
No. 2 18 qts.	1 to 25 cows	3 milkers	\$10 00
No. 3 34 qts.	25 to 50 cows	5 milkers	12 00
No. 4 52 qts.	50 to 100 cows	8 milkers	15 00

"O & S" Dairy Boiler

Designed especially for farm use, such as cooking feed, steaming milk-cans, and heating water. It is built in accordance with the A.S.M.E. Code and good for 100 pounds steam pressure.

The trimmings include base, shaking-grates, hood, safety-valve, gauge-cocks, steam-gauge, water-gauge, blow-off valve, check-and stop-valve, and injector with piping.

SPECIFICATIONS

Diameter of Boiler, inches	20
Height of Boiler, inches	40
Number of 2-inch Tubes	10
Length of Tubes, inches	26
Height over all, inches	59
Weight complete, pounds	550

Price, \$105.30



"Farmer's Favorite" Boiler and Sterilizer

It can be used for a great variety of purposes, such as cooking feed, heating water, sterilizing dairy utensils, rendering lard, scalding hogs, boiling spraying mixture, etc.

Top section, or boiler, is made of heavy galvanized steel, which fits securely into lower section, or furnace. The furnace is made with cast-iron ends and the center, or body, of heavy steel plate. The firebox is the length of the Cooker. It may be used indoors as well as outdoors.

No. 2. 30 gals.	\$19 20	No. 4. 50 gals.	\$24 00
No. 3. 40 gals.	21 60	No. 6. 100 gals.	30 00

Prices f.o.b. factory. Faucet to draw off liquid, attached, extra \$1.50. One length of 6-in. stove-pipe and elbow included with Cooker.



Specialty Hand Bottle Filler



The dairyman who bottles from 50 to 200 bottles of milk, cream, or butter-milk daily will find this Filler a saver of time, labor, and money. The Filler is made entirely of metal and will give perfect performance for many years. It is perfectly smooth inside and out, and washing it is a matter of but a few seconds. Fills bottles quickly and accurately and works on any size bottle. Price, \$9.

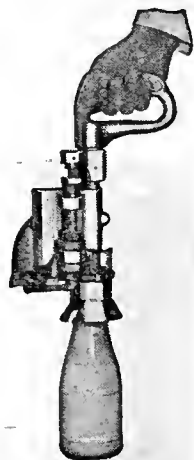
Rotary Hand Bottle Capper

SANITARY—SIMPLE—FAST

If you are selling bottled milk, you cannot afford to be without one of these improved Cappers. It is faster and more sanitary than the old-fashioned "thumb and finger" method. Easy to operate; nothing to get out of order; always ready for immediate use. Conforms with all sanitary law requirements. Uses No. 2 standard bottle caps.

All working parts are case hardened and work on ball bearings. Extremely simple to clean. Weighs 8¼ pounds. Price, \$18, postpaid.

Catalogue and Price-List of larger Bottle Fillers and Cappers on request



Ask for catalogue of Ney Barn Equipment, showing a complete line of Barn Equipment

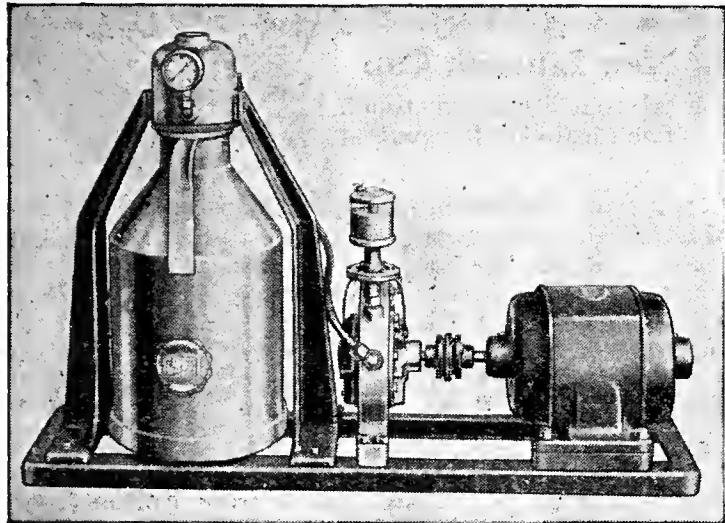
HINMAN PIPELINE MILKER

The Hinman "10 Star" Milking Unit

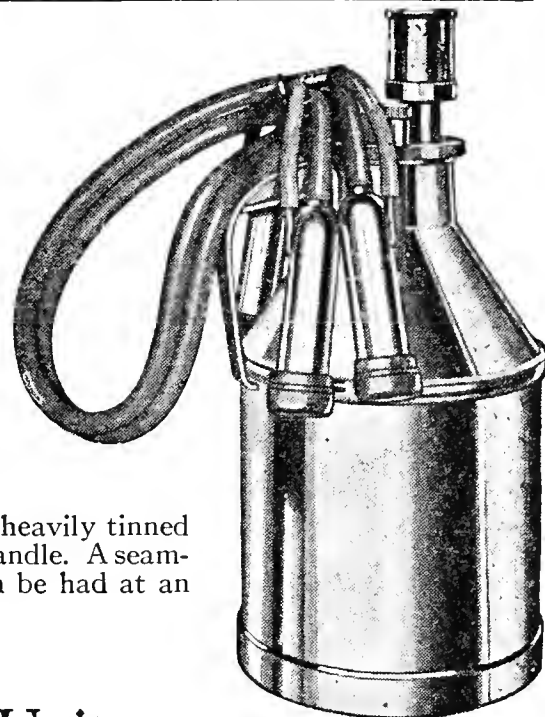
The simplest and easiest to clean of all popular Pipeline Milking Machines. It embodies the latest improvements in design—the result of many years of development and manufacture of Milkers. The Hinman "10 Star" Milking Unit can be used on any pipeline.

The teat-cups positively stay on without a surcingle; snappy relief is effective through squeeze of one-piece rubber-lined cups. New visible milk-flows; automatic vacuum shut-off at milk-claw; and a timer mechanism that has been in constant operation for more than three years, perfected in every detail.

Standard equipment includes a heavily tinned 18-quart pail with sturdy jug-type handle. A seamless, non-rusting aluminum pail can be had at an additional cost.



The New Hinman Power Unit



"10 Star" Milking Unit

The New Hinman Power Unit

A completely assembled unit—motor and pump are direct connected. No belts required; no complicated parts to oil; no tank that is hard to clean. All these difficulties are swept aside by the compact Hinman Power Unit with visible automatic lubrication. Furnished with either Electric Motor or Gasoline Engine.

Ask for price-list and complete details of this latest improved Milker before you buy any Milker

Stewart Clipping and Shearing Machines

Latest Model 21 Clipmaster

Clips Cows, Horses, and Mules



Has new motor with ball-bearings instead of bushings that develops nearly double the speed and power of former models. Air cooled by enclosed fan. Shock-proof composition handle—no ground wire to bother with. New ball-bearing tension enables blades to stay sharp longer. The latest of the famous Stewart Clippers.

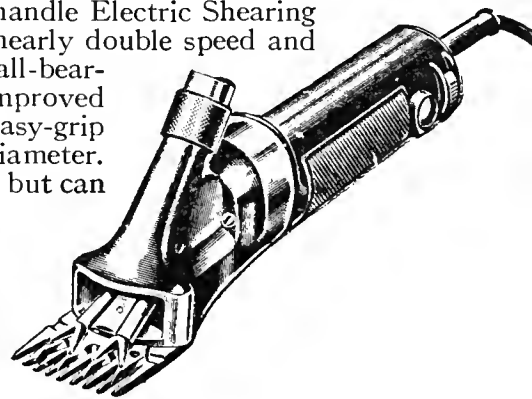
For any 110-volt current, AC or DC, complete with 20-foot rubber-covered cord.

No. 21. \$17.95.

Same as above, for 32-volt direct current. \$19.95.

New Improved No. 31 Shearmaster

New improved motor in handle Electric Shearing Machine. Motor develops nearly double speed and power of former models. Ball-bearings instead of bushings. Improved E-B tension control. Easy-grip handle just 2 inches in diameter. Designed for sheep or goats but can be used for clipping by changing the bottom blade or comb for No. 4-HC clipping blade listed below.



For 110-volt current, either AC or DC, complete with 2 combs, 4 cutters, and 20-foot special rubber-covered cord.

No. 31. \$22.95. Same as above, for 32-volt current. \$24.95.

SHEARING MACHINES ARE FOR SHEARING SHEEP OR GOATS—CLIPPING MACHINES FOR COWS, HORSES, AND MULES

Stewart HAND-OPERATED Clipping and Shearing Machine

For Clipping—No. 1

Where electricity is not available, this is the most satisfactory Clipping Machine. Built sturdy and strong for years of use. Complete with 6-foot flexible shaft and chain, latest patented D-1 clipping head including one set of blades. Shipped complete, knocked down, in wooden box. No. 1. \$13.45.

For Shearing—No. 9

Special gears make this Stewart Machine the easy way to shear sheep and goats. Universal jointed cog-driven shaft with light-running, ball-bearing No. 7 narrow handpiece complete with two combs, four cutters. Shipped complete, knocked down, in wooden box. No. 9. \$23.50.



No. 9

Extra Blades for Shearing

- No. 276. Three-tooth top plate or cutter for No. 9. 30 cts.
- No. 4-HA. Four-tooth top blade or cutter for Shearmaster. 35c.
- No. 277. Ten-tooth bottom blade or comb for No. 9. 80 cts.
- No. 4-HB. Nine-tooth bottom blade or comb for Shearmaster. 75 cts.
- No. 4-HC. Bottom blade for Shearmaster; for use in clipping only. \$1.50.

Extra Blades for Clipping

- No. 360. Top blade for B-1 clipping head only. \$1.35.
- No. 361. Bottom blade same as above. \$1.85.
- No. 90. Top blade for C-1, D-1 or D-2 clipping heads. \$1.35.
- No. 99. Bottom blade same as above. \$1.85.
- No. E-1. Top clipping blade for J-1 and J-2 Clipmaster only. \$1.35.
- No. E-2. Bottom blade same as above. \$1.85.
- No. C-71M. Top blade for Model 21 Clipmaster. \$1.35.
- No. 72-M. Bottom blade same as above. \$1.85.



Pilling Milking Tubes

For sore and obstructed teats and hard-milking cows.

Can be made any length by moving the adjustable slide; can also be used for a probe to pass the obstruction. 2¼-inch 65 cts., 2¾-inch 80 cts., 3¼-inch 95 cts., 3¾-inch \$1.10, 4¼-inch \$1.25, postpaid.

Pilling Hard-Rubber Teat Plug

Designed to prevent dropping of milk in cows where there is a relaxation of the little muscle at the end of the teat and consequent leakage of milk as soon as enough pressure accumulates in the udder. 65 cts., postpaid.

Pilling Teat Expander

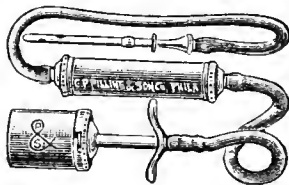
Intended to expand and enlarge the opening of hard-milking teats. It also expands the milk canal at the same time. Easy to use. Made of metal and nickel plated. 60 cts., postpaid.

Medicated Wax Teat Dilators

First open teat with a metal dilator, probe or milk tube, then keep a Wax Dilator in teat between milkings. 25 cts. per pkg. of 18, postpaid; \$1 for 7 doz., postpaid.

Pilling Teat Opener

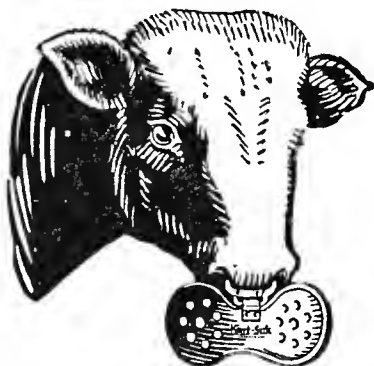
Used as a reamer or dilator to pass the obstruction. It does not cut the obstruction. \$1, postpaid.



Pilling Milk Fever Outfit

Made according to specifications of the U. S. Department of Agriculture, except it is made with patented metal pump instead of rubber bulb. Price with metal pump and regulator tube, \$3.50.

Prices on other Cattle Instruments on request. Send for booklet.



"Kant Suk" Calf and Cow Weaner

Being made with a hinge joint, it swings out of the way when the calf eats or drinks, but effectually prevents sucking. It is heavily tinned, sanitary, and humane.

		Postpaid
No. 1055. Calf size..	\$0 50	\$0 55
No. 1055½. Year-		
ling size.	60	65
No. 1056. Cow size..	70	75

"Pierceasy" Bull Rings

Made of the best materials obtainable. The long, sharp point cuts a clean hole. No tools necessary.

Bronze Rings		Copper Rings	
No. RB1. 2¾ x 5/16 in....	\$1 25	No. 10. 2¾ x 5/16 in....	\$0 30
No. RB2. 2 7/8 x 3/8 in....	1 75	No. 53. 3 x 3/8 in....	55
No. RB3. 3¼ x 7/16 in....	2 00		

"Bullchane" Pacifier

Subdues most vicious animal. The animal in stepping on the loose end of the chain will divert its attention. Bull can be turned out to graze and be safely approached when wanted. \$2.50.

Tie-Out Chains

Made with large swivel malleable iron stake ring, swiveling snap, and a swivel in the center.

20-ft. Chain, 80c; postpaid, 90c; 30-ft., \$1.20; postpaid, \$1.30.

COW TIES. For stable use. Well made with two toggles. 40 cts. each, postpaid 50 cts.

Paterson Genuine Vegetable Parchment

It is insoluble, having no taste or odor, and is moisture-proof and grease-proof. The nationally advertised wrapper for butter, cheese, lard, smoked or fresh meats, fish and other food products.

	8 x 11 in.	9 x 12 in.
1,000-sheet boxes, plain, no printing.	\$1 60	\$1 95
1,000-sheet boxes, printed "1 lb. net".		3 50
250-sheet boxes, plain, no printing.	50	60

Sealright Milk Bottle Caps

Sealright Caps are made from the new, improved Fulton Board, and are thoroughly waxed with a special process that drives the wax into the board. This fact, along with clear, sharp printing and clean-cut edges, makes Sealright the perfect Milk Bottle Cap. They are guaranteed to work in capping machines.



Sealright New Liftright Cap

Has strong tab that lifts at the touch of the finger. The ideal Cap for general use.

No. 2 size. Packed in tubes, 500 Caps each

Stock printing.	Postpaid	Prepaid
500 caps. ... \$0 45	\$0 55	25,000 caps. \$15 00
1,000 caps. ... 80	90	50,000 caps. 28 00
5,000 caps. ... 3 25	3 50	
Printed to order.	Prepaid	Prepaid
5,000 caps. \$5 50		25,000 caps. \$16 00
10,000 caps. 9 00		50,000 caps. 29 50

Sealright Standard Cap

This is the regular plug-type cap. Made from Fulton Board and of the same high quality throughout as all Sealright Caps.

No. 2 size. Packed in tubes, 500 Caps each

Stock printing.	Postpaid	Prepaid
500 caps. ... \$0 40	\$0 50	25,000 caps. \$13 50
1,000 caps. ... 75	85	50,000 caps. 25 00
5,000 caps. ... 3 00	3 20	
Printed to order.	Prepaid	Prepaid
5,000 caps. \$5 20		25,000 caps. \$14 50
10,000 caps. 8 40		50,000 caps. 26 50

All Caps sent in with orders will be duplicated free of charge provided an exact duplication is desired. If there are any changes in the wording or the design, and on all new designs, an electro charge of \$1.25 for one color and \$2 for two colors will be made on type-set designs.

Caps printed to order are shipped direct from factory and transportation charges prepaid at prices quoted.

Dairy and Milk Scale

These Scales are made with loose pointer which can be regulated on dial by thumb-nut at center to take up tare of pail or can. Figures and graduations in black and red on white enameled steel. Red figures used for second revolution of pointer. Heavy steel metal back. 7-inch lithographed dial; tinned hook. Adjusted by screw on bottom of slide.

No. 224. Capacity 40 lbs. by 1-10 lb.	\$3 00
No. 226. Capacity 60 lbs. by 1-10 lb.	3 50

Postage 15 cts. extra



Safety Bull Staff

Constructed of 1½-inch O. D. extra-heavy steel pipe with malleable lock-hook. Can be operated from two places. To hook the nose-ring into the Staff, pull on the slide-ring near the head of Staff; to release, pull on the snap-ring in handle of the Staff. Length 4 ft. 9 in. Weight 8 lbs. \$3.50, postpaid.

Genuine African Bass Stable Brooms

No. 286D. Solid block 14¼ in. long; length of stock 5¼ in., clear, 4 rows; complete with handle. \$1.35.

No. 500. Solid block 16 in. long; length of stock 7¼ in., clear, 5 rows; complete with handle. \$1.80.



Old Hickory Smoked Salt

Gives That Genuine Delicious Hickory Flavor to Meats

The "Plain" Smoked Salt is the original and only genuine Smoked Salt—a fine-quality Salt actually smoked with genuine hickory wood smoke.

It is most dependable. In half the time and with half the labor you can cure and smoke your own meats—without the loss from smokehouse shrinkage. The rich, natural meat juices and tasty fats are all retained, and every piece of meat is cured and flavored uniformly clear *through to the bone*.

The "Sugar Cure" Smoked Salt is prepared for those who prefer a blended mixture of Old Hickory Smoked Salt, pure granulated sugar, and Chilean saltpeter in proportions that have been proved most popular. Ready to use—no other mixing necessary.

Plain. 10 lbs. (enough to cure 115 lbs. of meat) \$1.
Sugar Cure. 9 lbs. (enough to cure 110 lbs. of meat) \$1.

Morton's Sugar-Cure Smoke Salt

Prepared especially for hams, bacon, and other pork cuts. It is properly blended with balanced spices, sugar-cure, and refined condensed wood smoke. Every ingredient necessary to cure the meat and to impart to it the curative and flavoring properties of wood smoke is blended with the Salt. Does the entire job easier, quicker, safer and adds delicious flavor. 2½-lb. can 25 cts., 10-lb. can \$1.

Morton's Tender-Quick

A special meat cure for beef, veal, mutton, lamb, fish, fowl, pork specials, wild game, etc. It is so perfectly blended that it cures faster, improves the flavor, and makes more tender cured meats.

2½-lb. can 50 cts., 10-lb. can \$2.

Morton's Meat Pump. Should be used to get a uniform cure from the rind to the bone. \$1.50.

Morton's Meat-Curing Thermometer. Provides a definite gauge to guide you all through the curing process. \$1.

Morton's Sausage Seasoning

Ready for use and makes delicious sausage. 10-oz. can 25 cts.

Wright's Condensed Smoke

Since 1895, Wright's Condensed Smoke has been used for smoking all kinds of meat, fish, and game. It is quickly and easily applied with a cloth or brush. Warranted pure and wholesome. One pint properly smokes 150 pounds of meat. 1-pt. 65 cts., 1-qt. \$1.

Blackman's Medicated Lick-A-Brik

Blackman's aids digestion; removes worms; purifies the blood; cures skin diseases, kidney, stomach and bowel trouble; prevents colic; creates a healthy appetite; tones up the system; removes old coat of hair and brings out the new.

Keep Lick-A-Brik in the feed-box at all times for best results.

25 cts. per Brick, doz. Bricks \$2.75, 2 doz. \$5.25.

Keystone Pure Salt Bricks

Practical dairymen and live-stock feeders know that live-stock like and want salt. Cattle and horses will be more thrifty and more healthy if given the proper amount of salt in their rations.

Place the Salt Bricks in the feeders built especially for them where the stock can have access to them at all times. They are of pure, unadulterated salt.

25 cts. per Brick; doz. Bricks \$2.75; 2 doz. Bricks \$5.25. Feeder, 50 cts. each.

Sal-Vet

Live-Stock Conditioner and Tonic

Rids live-stock of worms, gives them keener appetites and better digestion, promotes growth, and keeps them in healthy condition. A mineral compound for swine, cattle, sheep, horses and mules.

5-lb. pkg. \$0 75 | 50-lb. pail. \$4 50
10-lb. pkg. 1 20 | 100-lb. bag. 7 50
25-lb. pkg. 2 50

Retsof Rock Salt

The genuine Retsof Rock Salt in lumps weighing from 5 to 15 pounds each.
50 lbs. 75 cts., 100 lbs. \$1.25.

Perfection Dairy Salt

10-lb. sack 25 cts., 25-lb. sack 50 cts., 280-lb. bbl. \$4.

Keep This KILLER Handy

B-K kills the bacteria present on milk utensils. It kills on contact and insures low-count milk that brings better prices.

B-K sterilizes completely. Works faster, more cheaply and thoroughly than dry heat, hot water, or steam. Non-corrosive B-K does the job in hot or cold water.

B-K POWDER

Small bottle. \$0 75 | Large bottle. \$1 50

B-K LIQUID

4-oz. bottle. \$0 30 | 1-gal. bottle. \$2 00
10-oz. bottle. 50 | 5-gal. jug. 8 50
1-qt. bottle. 90

HTH-15 Farm Sterilizer

Here's a sterilizer that makes it easy to keep bacteria counts down and protect your milk-quality. HTH-15 is a dry, free-flowing powder packed in handy, key-opening cans. One measuring-spoonful of the dry powder makes 3 gallons of effective dairy-rinse that is safe to use on milk equipment.

You can also check the spread of respiratory and other diseases of poultry by using HTH-15 in the drinking-water, to disinfect brooders, incubators, eggs, etc. 1-lb. can 50 cts., 3-lb. can \$1, case of 6 3-lb. cans, \$5.

Wyandotte Cleaner and Cleanser

An efficient but harmless cleaner made purposely for washing milk utensils and containers. It contains no soapy grease, makes no soapy suds, nor resembles soap agents in any way. Used by thousands of farmers and dairymen everywhere.

5-lb. sack. \$0 45
80-lb. keg (bulk). 5 00
280-lb. bbl. (bulk). 13 80

K-O Live-Stock Fly Spray

10 per cent Milk Loss Avoidable

Careful experiments have demonstrated that fly-annoyance reduces milk-production. Knox-Out is an efficient killer and a repellent fly-spray. K-O is not gummy or sticky. It will not stain cows or clothing; it does not irritate the eyes or hands of the milkers. K-O has a light, pleasant odor, and does not taint milk.

1 gal. \$1 50 | 30 gals. \$35 00
5 gals. 6 75 | 50 gals. 55 00

Conkey's Fly Knocker

Every stockman, every dairyman needs Fly Knocker. Don't let flies torment your horses; don't let them worry your cows. Cows give more milk and butter-fat and horses work easier when you save their energy by keeping off those winged pests. Qt. 55 cts., gal. \$1.40, 5 gals. \$6.50.

Dr. A. C. Daniels' Horse Medicines

Colic Drops. For colic.	Postpaid \$1 30
C. C. & F. Drops. Coughs, colds, and fevers.	65 cts. and 1 30
Horse Conditioner. A condition powder.	65
W. K. Powders. An aid in expelling worms.	65
Wonder Lotion. Scratches, wounds, and cuts.	65
Gall Salve. A relief for saddle and harness sores.	35 cts. and 65
Antiseptic Healing Powder. For sores, cuts, and wounds.	65
Hoof Ointment and Softener.	65
Oster Cocus Liniment. Cord and muscle liniment.	35 cts. and 65
Spee Dee Track Liniment. For strained tendons, sore muscles, and a general rub-down. Gal. \$7.50.	65
Pine-Oil Disinfectant. A fragrant deodorizer. Gal. \$2.50.	65

Fiebling's Saddle Soap

The best preparation for cleaning saddles and all articles of brown leather. 12-oz. tin 35 cts.

Fiebling's Harness Soap Dressing. Oils, softens, and preserves all articles of black leather. 1-lb. tin 40 cts.

Corona Wool Fat Compound

Every farm, dairy, and high-class stable will find Corona indispensable for many uses. Excellent for barbed-wire cuts, brush scratches, bruised shoulders, cracked hoofs; irritated, cracked, chapped teats and udders. Stimulates healing of tender tissues. 8-oz. can 65 cts., 20-oz. can \$1.30, 5-lb. can \$4.

Kow-Kare

This great tonic and conditioner supplies invigorating elements needed by freshening cows, aids safe calving, promotes digestion and assimilation. Give KOW-KARE with the feed for low-cost production and cow health.

\$1.25 and 65 ct. sizes; 6 large cans \$6.25, postpaid.

Bag Balm

For Udder and Teats

Never be without this antiseptic ointment for quick healing of tender tissues. A potent aid in treating caked bag, inflammation, teat and udder troubles, and all farm healing.

10-oz. package 60 cts., postpaid.

Bag Balm Teat Dilators

For spider, scabs, bruises, internal injuries, hard milkers. Smooth, ivory-like, cannot irritate or absorb pus infection.

Package of 25, 60 cts., postpaid.

Dr. Hess' Stock Tonic

Used with success for more than 40 years, and now improved in keeping with latest tested and proved feeding practices. Minerals needed by heavy-producing dairy cows have been increased; whets appetite; sustains milk-flow well through lactation period. Valuable at calving-time; increases profits from steer-feeding, and puts horses and mules in condition.

1½-lb. pkg. \$0 25 | 15-lb. pkg. \$1 90
3-lb. pkg. 45 | 25-lb. pkg. 2 85
7-lb. pkg. 95 | 100-lb. drum. 9 40

Pratt's Animal Regulator

A tonic for Horses, Cattle, Sheep, and Hogs. Pkgs. 25 cts., 50 cts., and \$1, postpaid. 25-lb. pail \$2.85, postpaid \$3.22.

Pratt's Cow Tonic

A regulator and medicinal tonic. Pkgs. 50 cts. and \$1, postpaid. 25-lb. pail \$4.50, postpaid \$4.87.

Pratt's Hog Powder

A digestive tonic, bowel regulator, worm-expeller, and fattener. Pkgs. 50 cts. and \$1, postpaid.

Dr. Hess' Dip and Disinfectant

Kills foul odors. For sheep-, horse-stables, dairy-barns, hog-pens, poultry-houses, dog-kennels, and general disinfecting. 1-qt. can 55 cts., 2-qt. can 80 cts., 1-gal. can \$1.40, 5-gal. can \$6.50. Not prepaid.

Calves' Cordial

An effective intestinal astringent for Cows and Calves. 1-lb. pkg. 50 cts.



Common-Sense Calf Feeder

This is a device that is of great assistance to farmers in raising good calves. It is equipped with a nipple so that the calf gets the milk in the way nature intended. It is so made that the calf cannot upset the pail and waste the milk.

Single Feeder \$2. Double Feeder \$3.

Perfection Anti-Cow Kicker

In a humane way will prevent a cow from kicking. Will not injure or torture the animal in any way. Can be put on or taken off in a few seconds. \$1 postpaid.

Improved Keystone Dehorner

The Improved Keystone Dehorner is the most efficient dehorning knife on the market today. It has been improved in several important points of construction, until its strength, cutting service and durability have been greatly increased.

Complete with leader, rope, extra set of blades and screws, \$18, postpaid. Special circular sent on request.



START BEEKEEPING—IT PAYS WELL

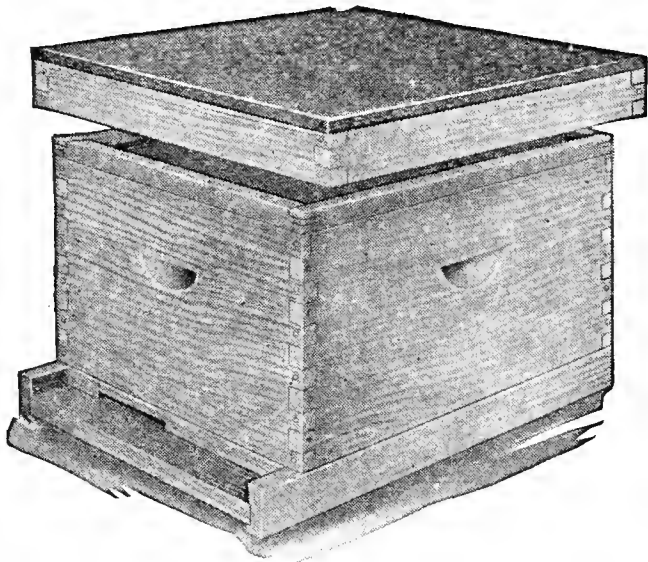
Root Quality Bee Supplies are well known and need no introduction to beekeepers. Every article is guaranteed to give you absolute satisfaction. If you do not find what you want listed on these two pages, write for our 64-page catalogue.

Standard Hives

Standard Hive

with metal cover KD. 10 Frames (no comb-foundation).

5 for \$16.15



The Standard Hive is made of the best selected pine lumber, perfectly milled and fitted together. It is the one most generally used by the largest honey-producers on account of its light weight and the ease with which it may be moved from one location to another.

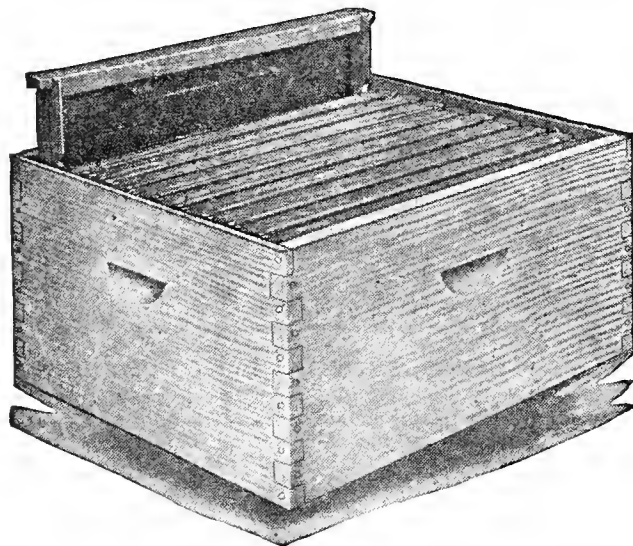
It is $16\frac{1}{4} \times 20$ inches, and $9\frac{9}{16}$ inches deep, outside measurements.

Hives in the flat are furnished with nails, tin rabbets, reversible bottom-board, metal cover with inner cover, and Standard frames.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22202	Hive complete, no foundation.....	1 KD	31	\$3 77
22203	Hive complete, no foundation.....	5 KD	149	16 15*
22205	Hive complete, full sheets foundation..	1 NP	33	7 55

*Packed in four packages.

Hive Bodies or Full-Depth Supers



Five
Hive-Bodies
10-Frame Size
No Frames

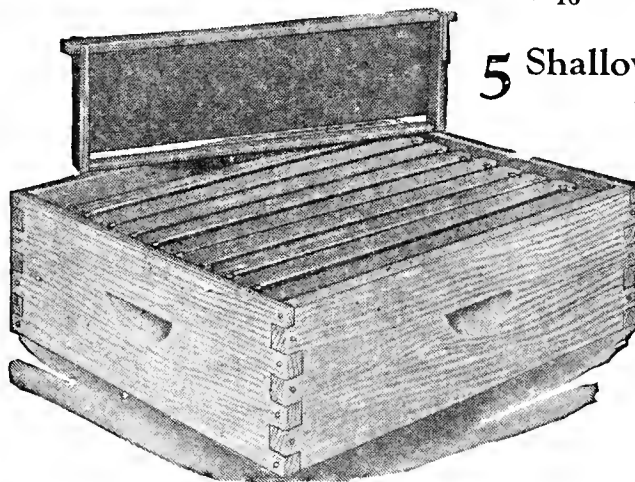
\$4.20

It pays
to have extra
Hive-Bodies

Made of the same high-quality materials as the Root Standard Hive. They may be used either as a brood-chamber, i. e., the lower story of the Hive, or as a full-depth upper story or super for extracted honey, thus forming a two-story Hive. Nails and tin rabbets included with bodies. No division-board.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22482	Body with frames, no foundation....	1 KD	15	\$1 72
22487	Body without frames.....	1 KD	12	97
22488	Body without frames.....	5 KD	45	4 20

Shallow Extracting Supers ($5\frac{11}{16}$ inches deep)



5 Shallow Extracting Supers

KD, with frames, no foundation

\$4.95

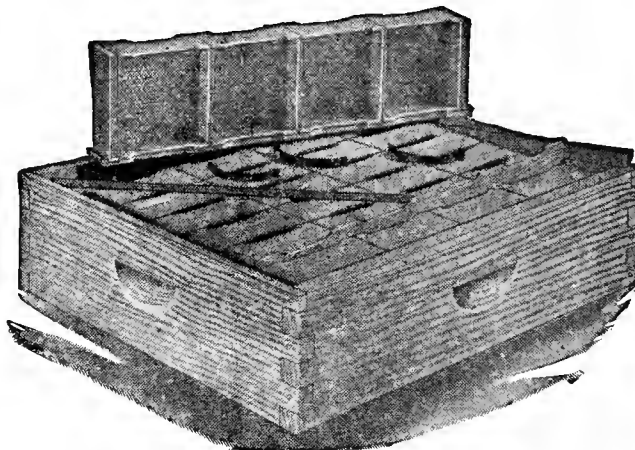
This Super is largely used in the production of chunk honey, also for producing extracted honey in shallow frames. Furnished with shallow Hoffman frames, $5\frac{3}{8}$ inches deep, without foundation. No tin rabbets or division-boards furnished.

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22522	Super with frames, no foundation...	1 KD	9	\$1 05
22523	Super with frames, no foundation...	5 KD	39	4 95
22527	Super without frames.....	1 KD	5	63
22528	Super without frames.....	5 KD	28	3 00

Beeway Section Super ($4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$)

This is the most commonly used Super. It is furnished with or without sections, and with or without inch foundation starters. It may be used on any hive, tiered up one or more high. Each Super holds 28 Beeway Sections.

Super complete without sections includes nails, flat tins, end-stops, Super springs, slotted section-holders, slotted separators, and follower.



$4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{7}{8}$ Beeway Section Super

Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22542	Super, no sections or foundation. . . .	1 KD	8	\$1 05
22543	Super, no sections or foundation. . . .	5 KD	42	4 95
22545	Super, with sections, full sheets. . . .	1 NP	11	3 00

Plain Section Super ($4 \times 5 \times 1\frac{3}{8}$)

It is a deeper Super ($5\frac{11}{16}$ inches), and is fitted with section-holders and M fences with end-stops and springs. It will admit eight section-holders and eight fences with Super springs. Holds 32 $4 \times 5 \times 1\frac{3}{8}$ Sections. Super complete without sections includes end-stops, section-holders, fences, Super springs, flat tins, and nails.

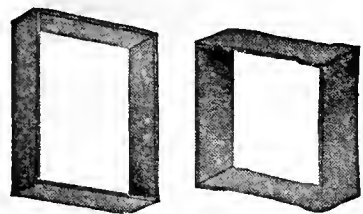
Cat. No.	DESCRIPTION	Quan.	Wt. lbs.	Price
22552	Super comp., no sections or foundation..	1 KD	11	\$1 95
22553	Super comp., no sections or foundation..	5 KD	50	8 85

Root Honey Extractors

4005	2-frame Honey Extractor.....	\$12 95
4035	3-frame Honey Extractor.....	14 95

WRITE OR ASK FOR 64-PAGE CATALOGUE OF ROOT'S QUALITY BEE SUPPLIES

BUY ROOT BEE SUPPLIES—SAVE MONEY



100 BEEWAY SECTIONS \$1.40

4 1/4 x 4 1/4 x 1 7/8

Root Quality Sections

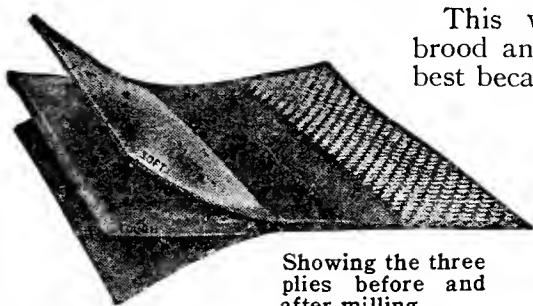
Made of finest basswood lumber, sorted with great care, dried exactly right, planed and cut exactly, expertly polished, dovetailed perfectly. Rounded bottom, V-grooved, so wood bends without breaking.

NO. 1 GRADE

4 1/4 x 4 1/4 x 1 7/8 Beeway Sections			4 x 5 x 1 3/8 Plain Sections		
Cat. No.	Wt. lbs.	Price	Cat. No.	Wt. lbs.	Price
2440. 100 Sections	8	\$1 40	2450. 100 Sections	6	\$1 30
2442. 500 Sections	32	6 70	2452. 500 Sections	29	6 20
2443. 1,000 Sections	62	13 40	2453. 1,000 Sections	56	12 40

Sections split three sides \$1 per 1,000 extra

Three-Ply Airco Comb Foundation



Showing the three plies before and after milling.

This wonderful foundation for brood and extracting combs is the best because there is no sagging, no warping, one-third more worker cells, least amount of gnawing, and 7 sheets to the pound. Sheets are 8x16 3/4 inches.

Leads all others in volume of sales.

	Per pkg.
5000. 10 sheets. For Standard Frames	\$1 10
5003. 50 sheets. For Standard Frames	5 10

Single-Ply Airco Foundation

Genuine Airco Process Foundation, made into clear, tough sheets from finest quality pure beeswax.

MEDIUM BROOD FOUNDATION

For Standard Frames			For Shallow Frames		
Cat. No.	Wt. lbs.	Per pkg.	Cat. No.	Wt. lbs.	Per pkg.
5110. 10 sheets	3	\$0 90	5120. 10 sheets	2	\$0 55
5113. 50 sheets	8	4 30	5123. 50 sheets	5	2 50

THIN SUPER FOUNDATION FOR COMB HONEY

For 4 1/4 x 4 1/4 Sections			For 4x5 Sections		
Cat. No.	Wt. lbs.	Per pkg.	Cat. No.	Wt. lbs.	Per pkg.
5331. 1-lb. carton	2	\$0 85	5351. 1-lb. carton	2	\$0 85
5333. 5-lb. carton	7	3 85	5353. 5-lb. carton	7	3 85

For 4 1/4 x 4 1/4 Split Sections			For Shallow Frames		
Cat. No.	Wt. lbs.	Per pkg.	Cat. No.	Wt. lbs.	Per pkg.
5341. 1-lb. carton	2	\$0 85	5321. 1-lb. carton	2	\$0 85
5343. 5-lb. carton	7	3 85	5323. 5-lb. carton	7	3 85

Frames

Made of clear soft pine lumber, and milled on special machinery designed and built by Roots.

Cat. No.	Wt. lbs.	per 100	10	50	100
2910. Standard Frame, 9 1/8 x 17 5/8	50	\$0 75	\$2 90	\$5 65	
2920. Shallow Extracting Frame, depth 5 3/8	26	50	2 05	3 95	
2930. Metal-spaced Frame 9 1/8 x 17 5/8	48	85	3 40	6 65	
2940. Shallow Extracting Frame, regular Hoffman top-bar	38	60	2 65	5 10	
2960. Regular Half-depth Frame, depth 4 1/2	24	50	2 05	3 95	
211. Root Frame-nailing Device. Wt. 10 lbs.					\$1.50 each.

Wire for Frames

Made especially for the purpose. A 1/2-lb. spool will wire 100 regular frames.

Cat. No.	Wt. ozs.	Price	Cat. No.	Wt. ozs.	Price
445. 1-oz. spool	2	\$0 10	447. 1/2-lb. spool	10	\$0 35
446. 1/4-lb. spool	6	18	448. 1-lb. spool	18	62

Root Smokers

Made of quality material throughout. Designed to give satisfactory service.

Cat. No.	Size of Fire Box	Wt. lbs.	Each
425. Junior (tin)	3 1/4 x 5 in.	2	\$0 80
423. Standard (tin)	3 1/4 x 7 in.	2	1 00
421. Jumbo (tin)	4 x 7 in.	3	1 20
427. Big Jumbo (tin)	4 x 10 in.	3	1 75

Bee Veils, Gloves and Hat

Cat. No.	Mailing Wt.	Price
255. Indestructible Veil	1 lb.	\$0 90
257. Alexander Veil	1 lb.	70
259. Delphos Veil, Copper wire in front	1 lb.	1 05
253. Veil (Cotton tulle)	3 oz.	70
256. Collapsible Hat	4 oz.	1 00
Drill Bee Gloves, Small, Medium, Large	1 lb.	80

Honey Section Cartons

Cat. No.	Wt. lbs. Per 100	100	500
7234. Window Cartons for 4 1/4 x 1 7/8 Sections	6	\$1 25	\$5 80
7235. Window Cartons for 4x5 Sections	6	1 25	5 80
7274. Regular Cartons for 4 1/4 x 1 7/8 Sections	6	80	3 50
7275. Regular Cartons for 4x5 Sections	6	80	3 50

Super Fixtures

Cat. No.	Wt. lbs. Per 100	10	50
2540. Section Holders for 4 1/4 x 4 1/4 x 1 7/8 Sections	23	\$0 45	\$2 10
2530. Section Holders for 4 1/4 x 4 1/4 x 1 1/2 Sections	20	45	2 10
2550. Section Holders for 4x5 x 1 3/8 Sections	37	65	3 30
2544. Beeway Wood Separators, 1 1/10 in. thick	13	25	1 10
2548. Beeway Wood Separators, thin	8	18	80
2833. P Fences, used with 4 1/4 x 4 1/4 x 1 1/2 Sections	15	65	3 10
2853. M Fences, used with 4x5 x 1 3/8 Sections	19	68	3 30
2903. End Stops	5	15	60
4248. 10-fr. heavy metal frame supports	7	20	68
4258. 10-fr. flat tins	8	15	60
453. Super Springs	1 1/2	10	40

Miscellaneous Supplies

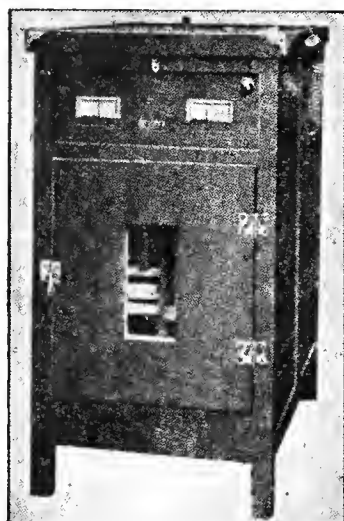
Cat. No.	Wt. lbs.	Price
22712. Cypress Bottom Board, 1 KD	7	\$0 75
22713. Cypress Bottom Board, 5 KD	35	3 35
22742. Hive Stand for 10-fr. Standard Hive, 1 KD	4	60
22743. Hive Stand for 10-fr. Standard Hive, 5 KD	25	2 75
22621. Metal Cover with Inner Cover, N. P.	10	2 00
22622. Metal Cover with Inner Cover, 1 KD	10	1 30
22623. Metal Cover with Inner Cover, 5 KD	46	5 70
22632. All-Wood Cover, 1 KD	8	75
22633. All-Wood Cover, 5 KD	32	3 35
22671. Inner Cover, without bee escape nailed	3	42
22673. Inner Cover, without bee escape, 5 KD	12	1 70
411. Double Bee-Escape	1 oz.	15
4242. Queen Excluder. Standard 3-Wire and Wood	4	68
4241. Queen Excluder. Special 7-Wire and Wood	4	73
4211. Wire Queen and Drone Trap	2	50
4212. Wire Entrance Guard	1/2	15
415. Root Foundation Fastener, with lamp	1/2	75
416. Root Foundation Fastener, without lamp	2 ozs.	25
212. Parker Foundation Fastener	1	35
420. Root Wax-tube Fastener	5 ozs.	25
213. Hand Section Press	1 1/4	40
205. Inexpensive Frame-Wiring Outfit	1	50
201. Combined Frame-Wirer and Wire Imbedder	10	3 25
401. Spur Wire Imbedder	1/2	20
404. Hive Tool, 8 in.	1/4	52
405. Hive Tool, 10 in.	6 ozs.	60
292. Bristle Bee Brush	3 ozs.	25
441. Plain Uncapping Knife, 8 1/2 in.	1	1 45
443. Plain Uncapping Knife, 10 in.	1	1 60
291. Boardman Feeder with cap only	3/4	20
7100. ABC and XYZ of Bee Culture. 815 pages.		
732 illus. Postpaid		2 50
7105. Starting Right with Bees. 98 pages. 184 illus. Postpaid		50

Write for price of Queens and Bees

Poultry Equipment and Supplies

All of the supplies and equipment listed on the following pages have been thoroughly tested and found reliable for the uses for which they are intended.

We do not hesitate to recommend any of this merchandise and stand back of everything we offer. We welcome the opportunity to serve you.



Hatch Chicks the Electric Way with a Leland Wilson Electric Incubator

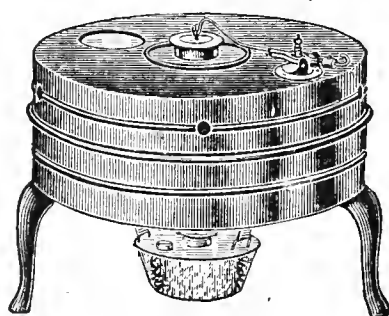
A SENSATIONAL DEVELOPMENT IN INCUBATORS

A Wilson Incubator will save you more money than any measures of economy you could inaugurate on the poultry-farm. It will pay for itself in two or three hatches. Sturdily built of the best materials, it has many exclusive features: circulating air, automatic temperature control, and moisture indicator and control.

The machine can be used for continuous hatching; all or any part of the capacity can be used. The operating cost is low—about 60 KW hours of electricity will complete the hatch in the 600-egg size. Equipped for 110-volt A. C. current, but can be furnished with other motor specifications. Shipped complete ready to plug in socket.

Capacity	Price	Capacity	Price
416 eggs.....	\$54 50	1,200 eggs.....	\$122 00
624 eggs.....	74 50	2,100 eggs.....	205 00

Baby Grand Incubator



Baby Grand Oil-heated
Incubator

An efficient, low-priced Incubator that provides for the small poultry raiser a machine that is dependable and economical to operate. It is made entirely of metal, has double walls, and is equipped with a moisture receptacle so artificial moisture can be applied if necessary. The temperature is controlled by a reliable wafer thermostat. Has window in the top so thermometer can be easily seen and read. The electrically heated Incubator is heated

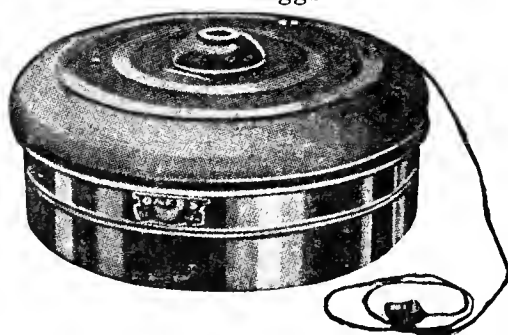
with a 60-watt electric bulb. Capacity, 50 eggs.

No.	Price
No. 91H. Oil-heated.....	\$6 00
No. 95E. Electrically heated.....	7 50

Oakes Electric Incubator and Brooder

Hatches Domestic or Game Bird Eggs

A wonderful hatcher. Case is made of metal, heavily insulated to prevent heat waste. Comes ready to plug in on any light socket. Easy to regulate to correct incubation. In room temperature of 70° F., current consumption of No. 87 is about 10 KWH; No. 88, about 13 KWH for 21-day hatch.



When hatch is completed, top may be lifted off and used as a Brooder. Legs and curtain for Brooder assembly are regular equipment. Furnished in 110-volt A. C. current. Complete with Thermometer, Candling Bulb and Tester, and Automatic Thermostat.

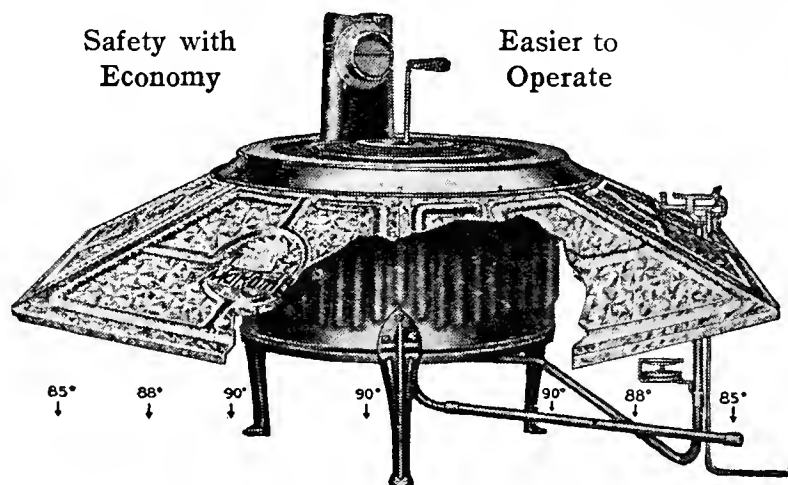
PRICES

No. 87. 60 hen-egg size. \$14 75 | No. 88. 100 hen-egg size. \$18 00

MaKomb Humane Oil-O-Stat Brooder

Safety with
Economy

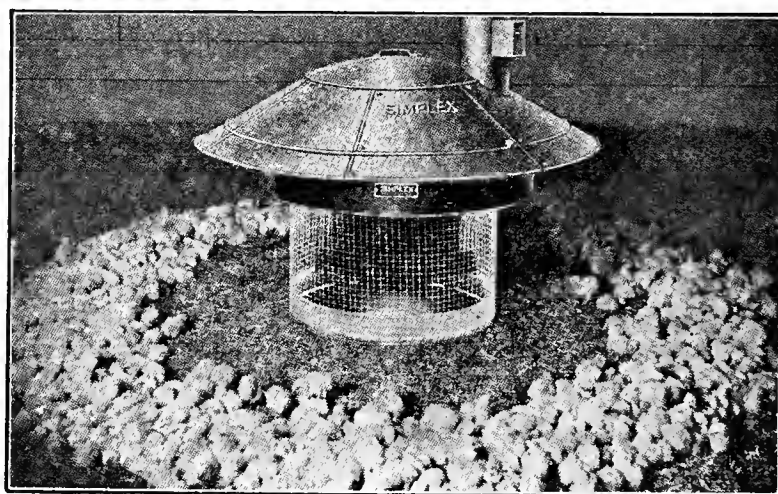
Easier to
Operate



The Humane Oil-O-Stat is so designed that an even heat is maintained under the Brooder, allowing the chicks to brood directly under and around the heater. It provides all chicks at the same time with comforting, protective temperatures.

Drum is copper-bearing blued steel, doubly resistant to rusting. The all-cast twin blast burner is very smooth in operation. Heater is 24 inches in diameter. Valve has safety overflow tube and is easily adjusted so the stove cannot get overheated. Operates efficiently at 20° below zero or 70° above. Canopy is made of galvanized steel. Capacity of tank, 9 gallons.

No.	Capacity	Diam. of canopy	Ship. wt.	Price
No. 1956.	Up to 1,000 Chicks	56 in.	81 lbs.....	\$21 90
No. 1965.	Up to 1,200 Chicks	63 in.	86 lbs.....	23 40



Simplex Brooder Stove

The Simplex is constructed with heavy cast-iron base and burner, with steel legs. The body of the Stove is made of heavy black sheet steel. It has a large circulating radiator on the top, around which the heat from the burner must pass before escaping. The heat is caught by the deflector which covers the top of the radiator, and deflected to the chicks on the floor. A very worthwhile and fuel-saving feature.

The Simplex Burner is especially designed to make "going out" impossible. It can be regulated to run as low as the ordinary house-lamp and will go as high as necessity requires, and will not go out under either regulation. Special catalogue on request.

No.	Size	Capacity	Diam. of Deflector	Diam. of Drum	Price
J41.	Junior for Oil	600 Chicks	41 in.	24½ in.	\$23 90
S41.	Senior for Oil	900 Chicks	41 in.	28½ in.	26 90
S48.	Senior for Oil	1,100 Chicks	48 in.	28½ in.	27 65
JG41.	Junior for Gas	600 Chicks	41 in.	24½ in.	21 90
SG48.	Senior for Gas	1,100 Chicks	48 in.	28½ in.	25 05

MaKomb Oil Brooder

Economical to Operate—Reliable—Low in First Cost

An efficient, safe, and economical Brooder which provides the same abundant heat as a coal Brooder, with a big saving in labor in handling fuel and ashes. Burns with a clean flame, which is evidence that no fuel is being wasted and that the full benefit of all the heat units in the oil is being utilized. The heat is automatically regulated by an all-brass gun-type control valve so that an even, uniform heat is maintained under all conditions.

Has copper-bearing blued steel drum, 14 inches in diameter, 13 $\frac{3}{4}$ inches high; wickless all cast-iron burner, and galvanized steel hexagon canopy 55 inches in diameter. Comes complete with oil-tank, separate shut-off cock, 5-inch draft adjuster, and overflow pipe. Accommodates 500 chicks. No. 1455. \$11.90.



A Real Buy at
\$11.90

MaKomb Coal Brooder



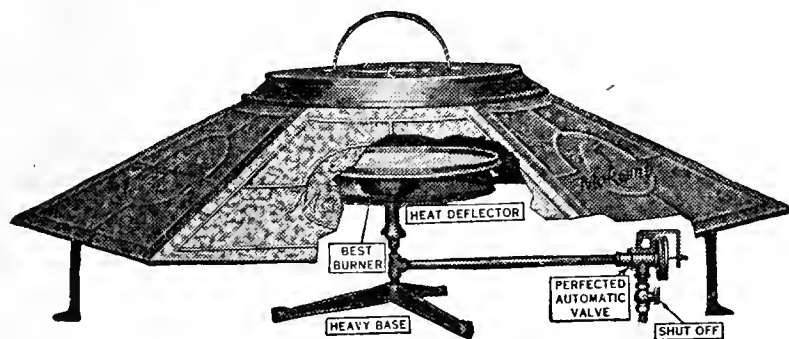
Outstanding value is evident in every detail of these improved models. The MaKomb is easy to operate—nothing complicated or to get out of order. Requires little attention. It is scientifically designed to raise more chicks with less work and less fuel.

The husky, cast-iron stoves have fluted barrels for greater radiation and efficiency. Patented upper damper leaves the stove-top entirely clear so the coal door is extra big and handy. It hinges back against the pipe, out of the way.

The canopy is made of best galvanized iron. It revolves around stove to any position and has a big hinged door in one section.

Model	Coal Capacity	Actual Chick Capacity	Diam. of Canopy	Weight Crated	Price
No. 656R.	40 lbs.	Up to 500	56 in.	102 lbs.....	\$15 00
No. 765R.	66 lbs.	Up to 700	65 in.	124 lbs.....	18 75

MaKomb Automatic Gas Brooder



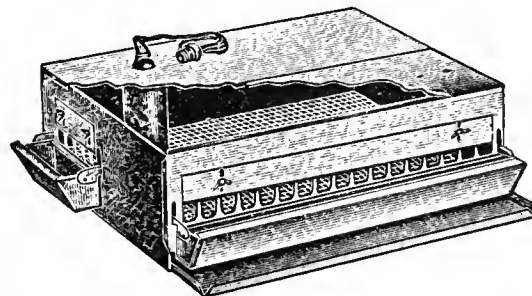
The MaKomb Gas Brooder is built for use in those localities where natural or artificial gas is available to the poultryman. This Brooder is provided with the new hexagonal canopy, firmly supported on legs. The automatic valve-construction has been held to close limits, and every precaution taken to insure perfect operation. The burner is supported by a heavy cast-iron tripod and can be operated with either natural or artificial gas.

	Actual Capacity	Diam. of Canopy	Weight	Price
No. 347.	250 chicks	45 in.	27 lbs.....	\$9 90
No. 356.	500 chicks	55 in.	32 lbs.....	10 80
Stove complete, without canopy, when sold separately.....				
47-in. Canopy, alone, \$4.40. 55-in. Canopy, alone, \$5.30.				6 50
No. 07-V. Automatic Gas Valve only. Use on any Gas-burning Brooder				2 85

Baby Chicks

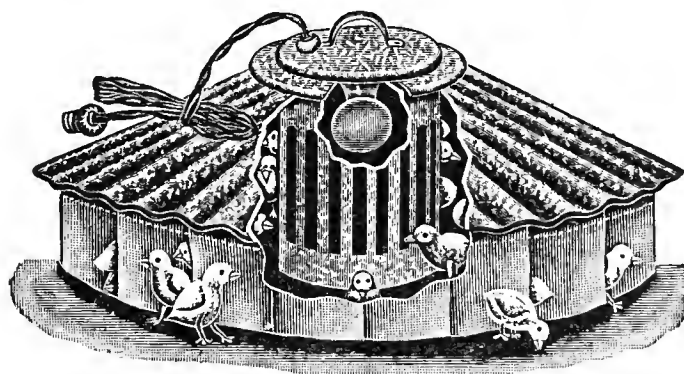
We exercise extreme care in the selection of our Baby Chicks and supply only Chicks from selected matings and blood-tested flocks. We can supply all popular breeds. We also make a specialty of White Pekin Ducklings and Bronze Baby Turkeys. Price-list gladly sent on request.

Oakes Metal Box Brooder



Made entirely of heavy galvanized steel. Sanitary and easy to keep clean. Floor is made of $\frac{1}{2}$ -inch mesh hardware cloth. Has feeder-trough across front and water-trough at side, both removable. Inside dimension, 18 x 22 x 6 inches high. Heated by electric bulb (bulb not furnished). Accommodates 50 day-old chicks. A real brood unit at a low price. No. 375N. \$2.80.

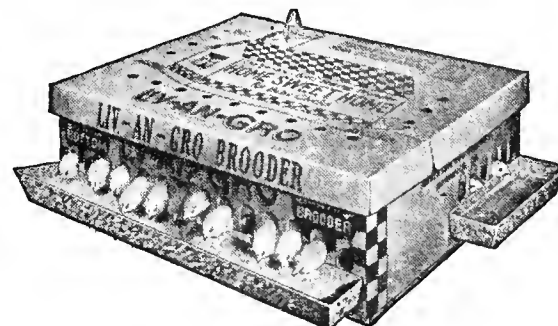
Oakes Educator Electric Hover



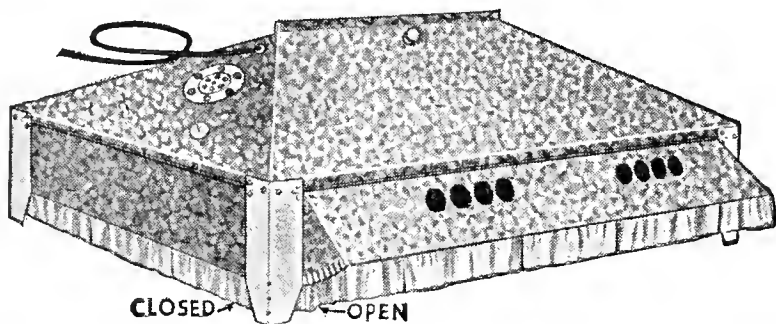
A low-priced, trouble-proof Electric Brooder for 50 to 60 chicks. Can be used in any heated room or basement. Uses bulb for heat (bulb not furnished). Canopy is 25 inches in diameter and made of heavy galvanized steel, with corrugations to give rigidity. Furnished with curtain to retain heat, metal stand, 8-foot drop cord, and plug-in socket. No. 25E. \$2.40.

Liv-an-Gro Brooder

It is easy to raise chicks in this efficient, low-priced Brooder. Both cover and body are made of heavy waterproof corrugated board. Has large, removable feed- and water-pans. Free circulation of air is provided by the wire screen floor. An ordinary 40-watt electric light bulb supplies ample and uniform heat. Furnished with lamp socket, 6 feet of extension cord and plug connection. (Bulb is not furnished.) Capacity, 50 day-old chicks. No. LG-2. \$2.15.

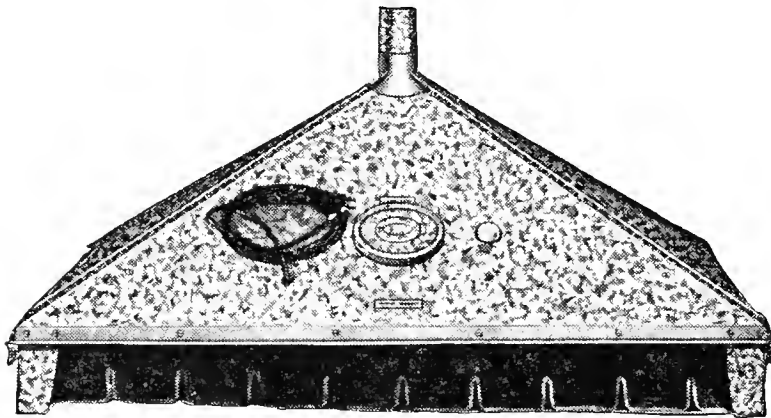


Cyclone Electric Brooder



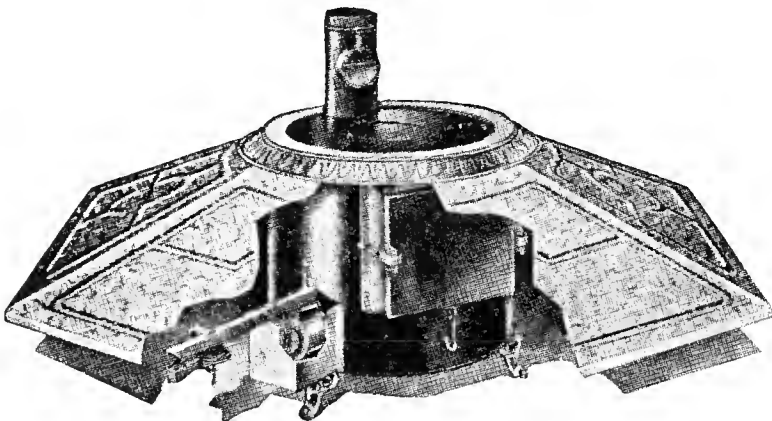
This Brooder provides an easy method for raising more and better chicks. The wings allow for different size broods and also give additional brooding area needed for growing chicks. Even radiation of heat is attained by a deflector so shaped that the heat is deflected and circulated over the entire brooding floor. With wings closed it measures 32 by 46 inches; wings extended, 44 by 52 inches. Has two heating elements, giving a total capacity of 600 watts. Capacity, 250 chicks. No. 300. \$23.50.

MaKomb Elect-O-Stat Brooder



The Elect-O-Stat has everything an electric Brooder should have—plus quality construction. It carries two heating circuits of 400 watts each, which can be operated together or independently. Element made over-size to secure uniform distribution of heat from edge to edge of canopy. Has automatic snap-control switch, braided curtain, adjustable legs, pilot-light, and rubber-covered lead wire. Canopy is 52 inches square. Capacity, 400 chicks. No. C7-452. \$26.

MaKomb Wood-O-Stat Brooder



In localities where cordwood is cheap and plentiful, the wood-burning Brooder offers an economical and dependable method of brooding chicks.

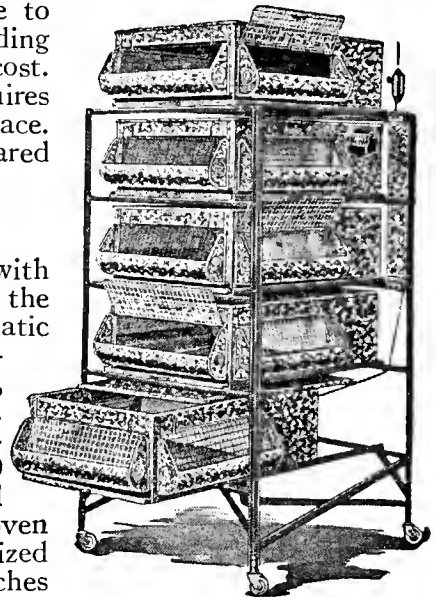
The heater of the Wood-O-Stat is made of heavy-gauge steel and is 24 inches in diameter, 19¼ inches deep inside, and has ample capacity to hold fire overnight. Has automatic control and automatic draft adjuster. Canopy is 63 inches in diameter, made in one solid assembly, and is held up for refueling by the big fuel-door. The Wood-O-Stat is well constructed throughout and is simple and practical in operation. Capacity up to 600 chicks. No. 165. \$21.

Gro-Ezy Electric Battery Brooder

This Brooder makes possible to poultrymen the battery brooding method at a surprisingly low cost. Made entirely of metal and requires only 38 x 31 inches of floor-space. Thousands of chicks can be cared for in a small room.

BROODER UNIT

Each brood unit is equipped with patented heating element, and the heat is controlled by an automatic thermostat. It has two feed-troughs and one water-trough, both removable for cleaning. Three adjustments accommodate chicks from a day old to 10 weeks. Capacity, 100 day-old chicks. Has ½-inch mesh woven wire floor and heavy galvanized steel droppings-pan, with 1⅜ inches clearance from floor; both removable from front. Equipped for 110-volt A.C. Carries Underwriters' label.



No. 805. Gro-Ezy Five-Unit Brooder

Single unit may be operated on shelf, box, or table. Unit sold separately, or in assemblies as priced.

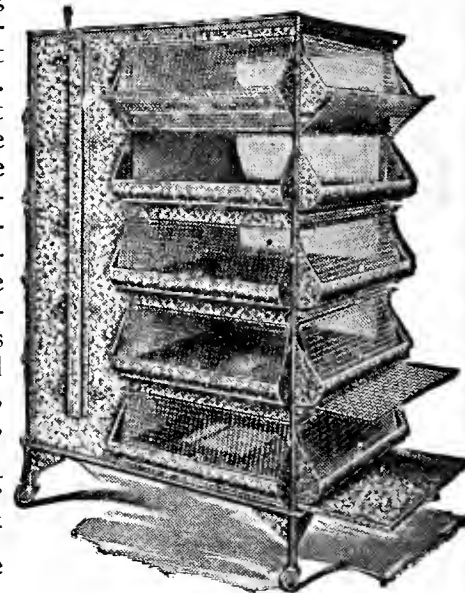
	Each
No. 801. Single Brooder Unit.....	\$9 90
No. 803. 3 Units and Rack.....	39 10
No. 805. 5 Units and Rack.....	61 70

Oakes Battery Brooder

An ideal unit for starting chicks. By its use chick mortality is reduced to almost zero for the first three weeks. Metal construction throughout—strong and sturdy; portable—can be rolled any place easily. Automatic temperature control in each compartment. Droppings-pans and ½-inch mesh wire floor, removable from front and rear. Each compartment has 2 feed-troughs and 1 water-trough. Total floor space in 5 compartments, 6,960 square inches. Capacity, 750 day-old chicks.

Choice of three heating methods: Electric, Gas, and Hot Water. Construction of all three models is exactly the same, except heating units.

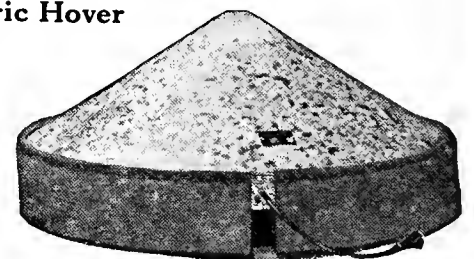
	Each
No. 709E. Electrically heated.....	\$100 00
No. 709G. Gas-heated.....	96 00
No. 1709. Hot-water heated.....	100 00



Jamesway Electric Hovers

Jamesway 32-in. Electric Hover

A very well-built Hover having double-shell canopy, with heavy insulation between. 200-watt ring heating element thermostatically controlled. A special safety spring is provided for wafer protection; all regulator points enclosed for safety. Air vent-pipe through center. Rubberized, removable curtains. Sets on metal legs. Intended to be used in a warmed room. Capacity, 200 chicks. No. 698. \$11.50.



Jamesway 21-in. Electric Hover

Suitable for brooding chicks in a warm room. Has 50-watt heating element. Capacity, 50 chicks. No. 696. \$5.15.

MaKomb Laying Batteries

Sufficient experimental work has been carried out during recent years to prove that the Laying Battery method of producing eggs and meat at a minimum cost can be successful. In the MaKomb we offer the latest improvements in Laying Battery equipment.

Lowers feed-cost. Reduced feed-consumption is assured and 10 pounds of feed should be saved annually per hen.

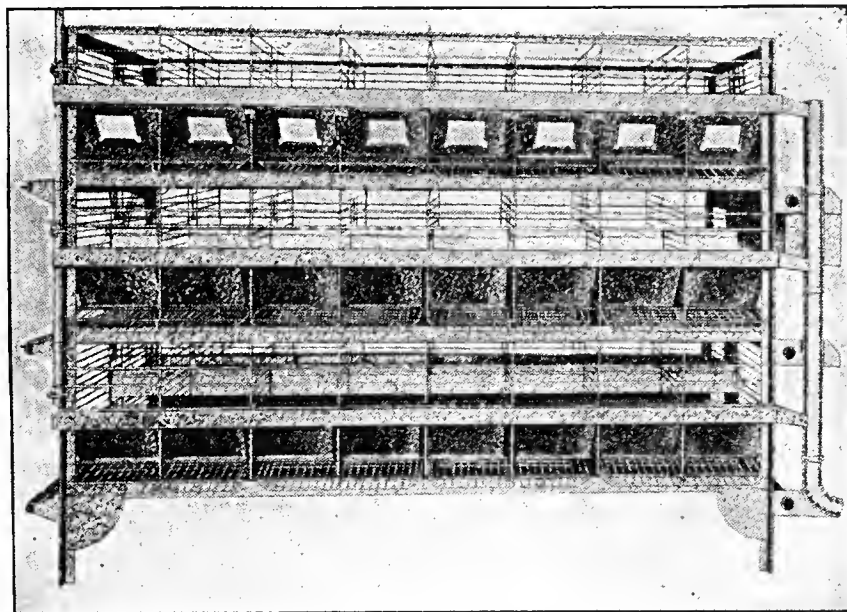
Labor reduced. With this new model 1,000 hens can be cared for easier than the same number can be taken care of in the old floor method.

Automatic culling. It is easier to discover the non-producers and ailing fowls, with consequent greater opportunity to avoid total loss.

Doubles capacity. For example, allowing the recommended 4 square feet per bird, a house 20 x 60 feet should carry 300. Equipped with rows of 9 72-bird units, it houses 648, with wide aisles to work in. Buildings are a costly factor, and the securing of double capacity justifies the use of Batteries.

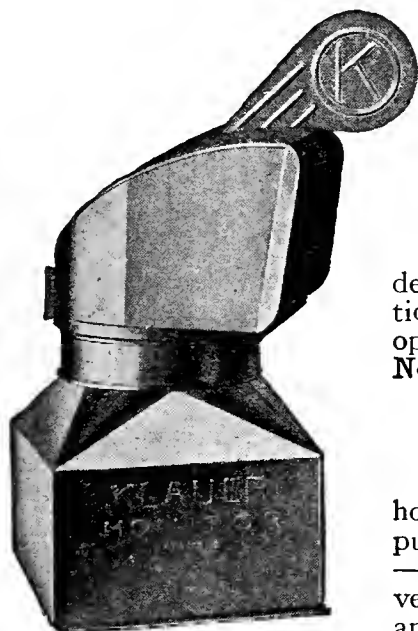
All sizes (except 12-hen) are equipped with heavy canvas, rubber-covered belts.

	Each
No. 112. 12-Hen Battery.....	\$23 00
No. 136. 36-Hen Battery.....	65 00
No. 148. 48-Hen Battery.....	87 00
No. 172. 72-Hen Battery.....	130 00



	Each
No. 184. 84-Hen Battery.....	\$147 00
No. 196. 96-Hen Battery.....	163 00
No. P7-44. Finishing Battery. Capacity 100 2-lb. broilers...	39 50

Ask for descriptive circular and see the Battery on display at our store



Monitor Ventilator

Monitor Revolving-Head Ventilator

Made of the best grade of heavy galvanized steel and has full ball-bearing head. Weather-proof and freeze-proof construction. Can be fitted to any pitch of roof. Flue 12 in., base 16 x 16 in., height 36 in. No. K12. \$8.10.

Klauer Ventilating Wall Window

For barns, poultry houses, hog-houses, or any other frame building where light and ventilation are desirable. Made of 26-gauge galvanized steel. Latch permits glass to be tilted into eight different positions. Window may be locked securely. Glass 20 x 28 in., building opening 20 $\frac{3}{8}$ x 28 $\frac{3}{8}$ in., overall size of frame 25 $\frac{1}{2}$ x 33 $\frac{3}{4}$ in. No. K2028. \$3.50 each, \$18 for 6, \$35 per doz.

Duo-Vent Metal Window-Frame

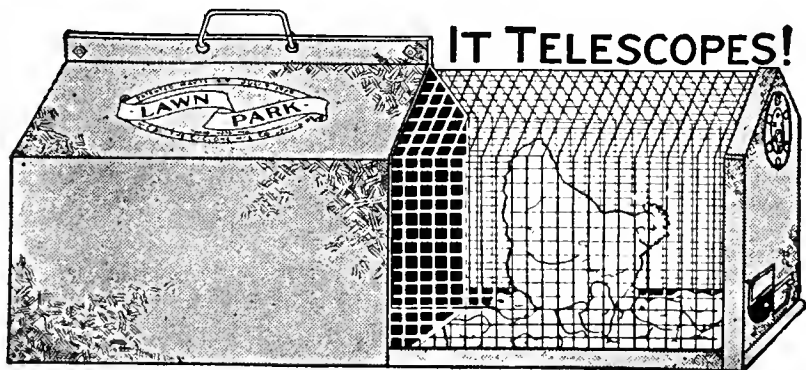
Ideal for use on brooder-houses, barns, hog-houses, milk-houses, or any other type of frame buildings not used for residential purposes. Duo-Vent Frames are easy to set up and easy to install—simply saw a hole and nail it in. Gives any type of window ventilation—opened at top without being raised, opened at top and raised in three positions, or fully opened for direct flow of air. Uses wood sash (sash not furnished).



No. K6912-3W, adjusted for top and bottom circulation

	Use	Opening	Each	1/2 doz.	Doz.
No. K4912.	4-light 9 x 12-in. sash	22 x 29 in.....	\$1 40	\$6 75	\$12 50
No. K6912-2W.	6-light (2 wide) 9 x 12-in. sash	22 x 41 in.....	1 90	9 25	17 50
No. K6912-3W.	6-light (3 wide) 9 x 12-in. sash	31 x 29 in.....	1 65	7 80	14 60

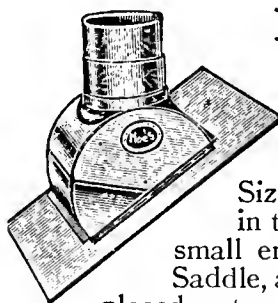
Lawn Park Brood Coop Saves the Chicks



IT TELESCOPES!

Made entirely of galvanized materials. Absolutely protects chicks against rats, cats, dogs, hawks, vermin, cold, storms, and all other chick enemies. Front has two hinged doors and damper ventilator and pushes in and out like a drawer. It is large and roomy, being 18 inches wide, 19 $\frac{1}{2}$ inches high, and 48 inches long, with park extended. Has removable bottom for cleaning. No. 50. \$3.75 each.

Moe's Adjustable Roof Saddle



Made of galvanized iron and adjustable to any required angle from an almost flat roof to one-half pitch. Quickly adjusted and locked rigidly in the desired position.

Size of flat roof flange 14 by 18 inches and made in two sizes for 4 and 5-inch brooder pipe. The small end of regular pipe is slipped underneath the Saddle, and as many lengths of pipe as desired can be placed on top of the Saddle.

	Each	Postpaid
No. 440. For 4-inch pipe.....	\$1 50	\$1 60
No. 441. For 5-inch pipe.....	1 60	1 70

Smoke-Pipe Top Cap. Chimney Cap for brooder stove-pipe. No. 444. For 4-in. pipe, 30 cts. each. No. 445. For 5-in. pipe, 35 cts. each.

Smoke-Pipe for Brooder Stoves. Blue steel in 2-ft. lengths, 4-in. diam., 15 cts. per length; 5-in. diam., 16 cts. per length.

Cast-Iron Dampers. For 4-in. pipe, 13c. ea.; for 5-in. pipe, 15c. ea.
Elbows, Crimped. 4-in. diam., 15 cts. each; 5-in. diam., 17 cts. each.

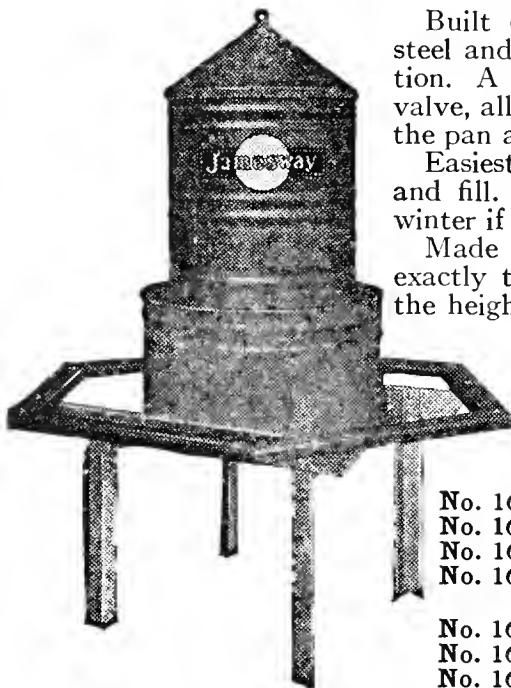


Jamesway Poultry Equipment

EQUIPMENT THAT MAKES BIG EGG-YIELDS

Jamesway Poultry Equipment is built for the discriminating buyer who buys equipment not because of the price, but because of the service it will render in increasing egg-yields, in keeping hens healthy and contented, and in making it easier to care for them.

Jamesway Poultry-Waterers



Built of heavy rust-resisting sheet steel and hot galvanized after fabrication. A copper float operates a brass valve, allowing fresh water to flow into the pan as it is used.

Easiest Waterer to disinfect, clean, and fill. Your hens require water in winter if you want winter eggs.

Made in three sizes. All sizes are exactly the same construction, except the height of the tank is more or less, depending on the size. Five-gallon size will accommodate 100 birds; 8-gallon size, 150 birds; 10-gallon size, 200 birds.

Five-gallon Size	
No. 1602. Lamp-heated.....	\$5 45
No. 1603. Unheated.....	4 20
No. 1604. Electric-bulb-heated.	6 75
No. 1606. Without base.....	3 60

Eight-gallon Size	
No. 1612. Lamp-heated.....	\$6 55
No. 1613. Unheated.....	5 30
No. 1614. Electric-bulb-heated.	7 85
No. 1616. Without base.....	4 70

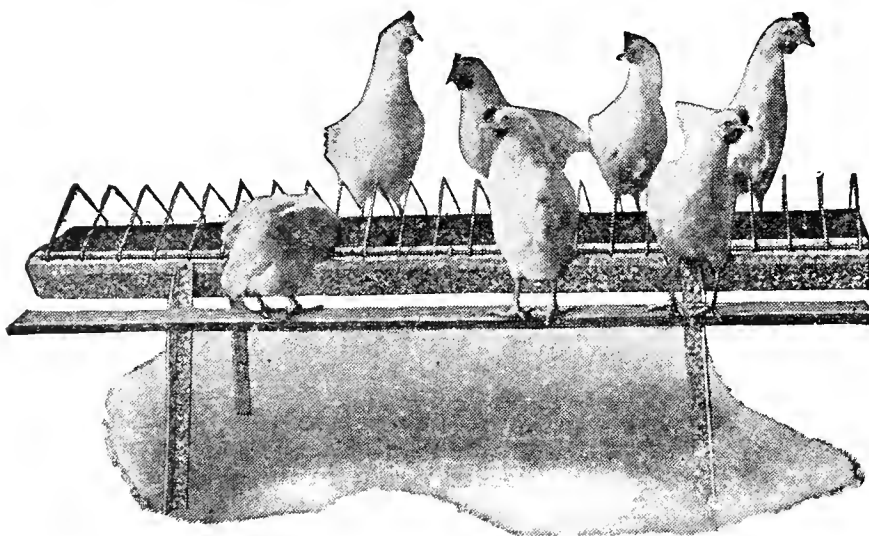
Ten-gallon size, any style, 45 cts. more than 8-gallon size

No. 585. Stand as illustrated for any size or style except Waterer without base. \$1.50.

No. 343. Stand for any size Waterer without base. For growing flocks. 50 cts.

No. 140. Kerosene Lamp. Holds 2 quarts of oil. \$1.

Jamesway Open-Trough Mash Feeders



Big, roomy trough for feeding dry or wet mash and green feeds. Wire guard prevents hens from getting into trough. Wide lip on trough keeps hens from pulling mash out on floor. For feed-saving, cleanliness, and real satisfaction, buy this Feeder. Trough is 10 inches wide and 5½ inches deep. Perches 20 inches from floor to prevent vent-picking by birds on floor.

No. 525. Length 5 ft. Capacity about 50 lbs. mash..... \$5 25

No. 657. Length 8 ft. Capacity about 80 lbs. mash..... 7 40

No. 925. Length 5 ft. Rotating reel in place of wire guard.... 5 25

Baby Chicks. For many years we have made a specialty of furnishing day-old Chicks of all leading breeds. Price-list gladly sent on request.

Jamesway Clean-Feed Chick-Trough



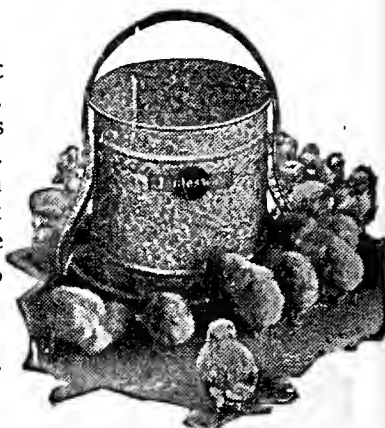
No. 600 Feeder with Stand

This Clean-Feed Trough keeps chicks out of the feed. Spacing between wire guards can be adjusted to openings 1 and 2 inches as chicks grow older. Trough provides feeding-space for 50 to 150 chicks. Trough is made of galvanized sheet steel, 44 inches long, 6½ inches wide, 3 inches deep. Used with stand it makes an ideal Feeder for growing birds.

No. 600. \$1.45. No. 612. Stand (as illustrated), \$1.35 extra.

Jamesway Chick-Waterer

Poultry experts say this is the most satisfactory Chick-Waterer ever built. Made from copper-bearing black sheets and hot galvanized after fabrication. Keeps a constant supply of clean, fresh water available for the chicks. Won't tip over. Holds 1½ gallons. Will take care of 50 to 150 chicks. No. 1407, \$1.05; postage 15 cts. extra.



No. 1407 Chick-Waterer

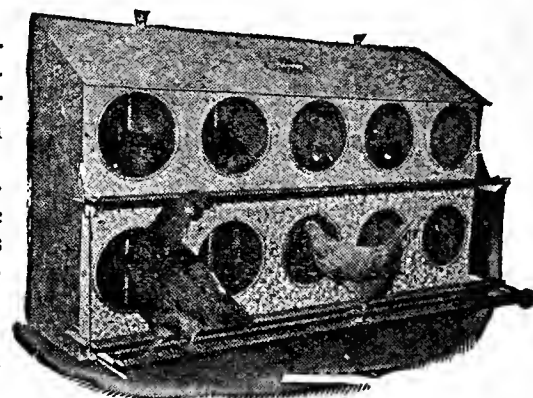
Jamesway 3-Gallon Chick-Waterer

A safe fountain for large broods of chicks. Depth of water in pan controlled by aluminum float concealed under tank. Holds 3 gallons. Will take care of 150 to 250 chicks. No. 1655, \$1.95; postage 25 cts. extra.

Jamesway All-Metal Nests

Lice- and Mite-Proof

Put Jamesway All-Metal Nests in your poultry house and watch your hens side-step the old mite-infested wood boxes. The hard, smooth, sanitary, galvanized surface of Jamesway Metal Nests offers no place for parasites to hide and thrive. They are clean, sanitary, lice- and mite-proof, and easily cleaned. Simply swing them forward and up. Straw and shavings fall out the open back and the nest is cleaned. All Jamesway Nests are equipped with folding perches.



No. 626. 6-Nest Unit (2 tiers, 3 ft. long)..... \$7 05

No. 630. 10-Nest Unit (2 tiers, 5 ft. long)..... 10 50

No. 635. 15-Nest Unit (3 tiers, 5 ft. long)..... 14 95

No. 831. Trap Attachment, extra, each 35 cts., doz..... 4 00

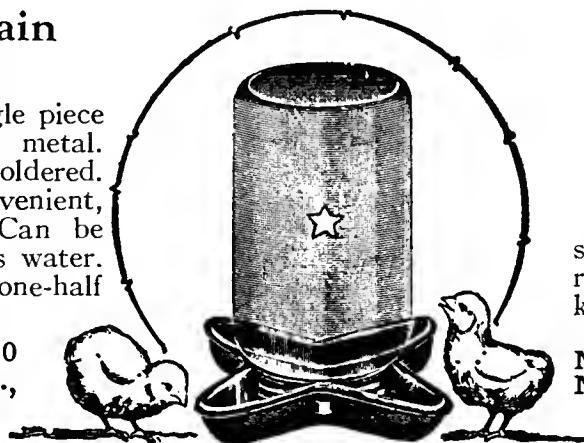
Jamesway Poultry-House Heater

A substantial, fire-safe, all-metal cabinet for use in the poultry house. Inside the cabinet may be placed any brooder (coal or oil), that will fit into it. No. 1194. Without stove. \$10.75.

Star Jar Fountain and Feeder

Die-stamped in a single piece of heavy rust-resisting metal. No parts to come unsoldered. Leaking impossible. Convenient, cheap, and sanitary. Can be used for feed as well as water. Will fit pint, quart, or one-half gallon Mason jar.

No. 32. Without jar. 10 cts. each, 6 for 50 cts., doz. 90 cts.



Round Mason-Jar Fountain

Can be used for feed as well as water.

	Each	Doz.
No. 142. Made of heavy terne plate.....	\$0 10	\$1 00
No. 10. Made of heavy clear glass.....	10	1 00
No. 6. Dark blue porcelain.....	20	2 20

Leader Gallon Fountain

Made of galvanized steel, in two parts. Easy to fill and keep clean. Has a fluted drinking-pan, which prevents crowding and keeps chicks from getting into the pan. The flat top makes it easy to fill when inverted. An excellent Waterer for chicks and grown fowl, at a low price. Capacity, 1 gallon.

No. 530. 40 cts. each, postpaid 55 cts.; 6 for \$2.15, postpaid \$2.35.



Gem Chick Fountain

A good, inexpensive Fountain for chicks or grown fowl. Easy to fill and clean. The pan is 10 inches in diameter and of scalloped design, giving the chicks easy access to the water without crowding. Can be carried by the handle on top when filled without danger of spilling. Made of galvanized steel.

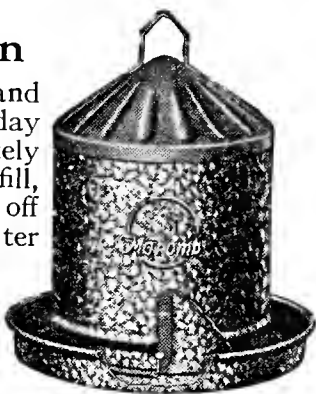
	Capacity	Each	Postpaid
No. 158.	1 gal.....	\$0 60	\$0 70
No. 159.	2 gals.....	80	95



MaKomb Top-Fill Fountain

A Top-Fill Fountain that is a time- and labor-saver. Intended for chicks from 1 day to 12 weeks old. The cone top is absolutely non-roosting. Outer can pulls off to fill, then an automatic spring valve closes off flow of water. Positive lock holds the outer can and makes carrying easy. Made of galvanized steel. The smooth, round drinking-trough is just wide enough for real utility. Capacity, 3 gallons.

No. G6-23. \$1.60; postage 15 cts. extra.

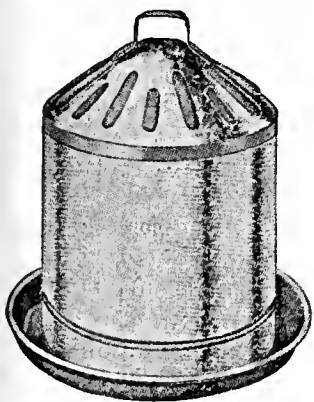


Crescent Cleanable Fountain

Made with double walls which keep the water cool in summer and retard freezing in winter. Operates on the vacuum principle, and the water automatically remains at the proper level in the pan without overflowing.

The top section telescopes snugly over the water container which is securely soldered to the pan. A very satisfactory Fountain at an attractive price.

	Capacity	Diam. of pan	Each	Postpaid
No. 268.	2 gals.	11 in.....	\$1 25	\$1 40
No. 269.	3 gals.	13 in.....	1 70	1 90
No. 270.	5 gals.	15 in.....	2 20	2 45



Eclipse Chick Feeder



Made of galvanized iron and intended for chicks and growing stock. The pan and top are both stamped in one piece, no seams, rivets or solder used. Sliding top makes them easy to fill and keep clean. Width of trough, 4 1/4 inches at top.

	Length	Feeder-holes	Each	Postpaid	Doz.	Postpaid
No. 27.	13 in.	10.....	\$0 15	\$0 25	\$1 60	\$1 80
No. 28.	23 in.	20.....	25	35	2 70	2 95

Dixie Chick Feeder



Made of best-quality galvanized steel. The half-round trough is 3 inches wide and easily filled and cleaned. Fitted with a heavy wire top guard to keep the chicks out of the Feeder, and this guard is adjustable so it can be raised as the chicks grow.

	Length	Each	Postpaid	Doz.
No. 460.	18 in.....	\$0 20	\$0 30	\$2 15
No. 462.	30 in.....	25	35	2 75

Star Chick Feeder

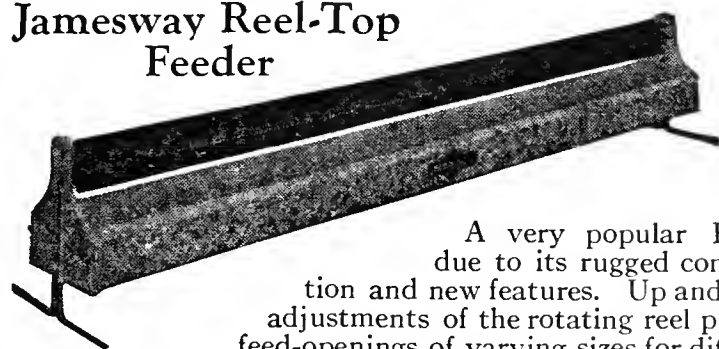


Has 4-blade metal reel, stiff and substantial, which revolves freely, prevents roosting and keeps the chicks out of the trough.

The reel has three adjustments to suit day-old chicks and up to 6 weeks or more. Width of trough 4 inches, depth at sides 2 inches, with turned-in edges to prevent waste. Total height 3 1/2 inches.

	Length	Each	Postpaid	Doz.
No. 290.	24 in.....	\$0 40	\$0 50	\$4 30
No. 292.	36 in.....	50	60	5 40
No. 294.	48 in.....	65	80	7 00

Jamesway Reel-Top Feeder



A very popular Feeder due to its rugged construction and new features. Up and down adjustments of the rotating reel provide feed-openings of varying sizes for different stages of chick-growth and prevent chicks from roosting on top of the Feeder. Adjustable wire legs permit Feeder to be raised or lowered for small chicks or growing birds.

	Each	Postpaid
No. 297. 36 in. long, 3 1/2 in. wide, 1 3/4 in. deep. Capacity, 4 qts. Has "Z" type reel. For baby chicks..	\$0 60	\$0 70
No. 292. 48 in. long, 4 in. wide, 2 in. deep. Capacity, 6 qts. 4-blade reel. For chicks and growing birds..	1 00	1 10
No. 332. 46 in. long, 5 1/2 in. wide, 3 in. deep. Capacity, 10 qts. 4-blade reel. For growing birds ..	1 30	1 45
No. 499. 48 in. long, 8 in. wide, 4 in. deep. Capacity, 17 qts. 4-blade reel. For growing birds.....	2 45	2 85

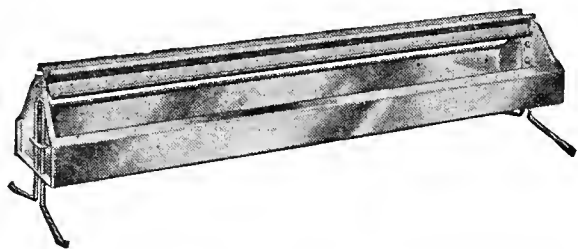
Hoelt's Feed and Water Cup

A practical and convenient Cup made to hang on the side of exhibition coops. Capacity about 1/2 pint.

Length, 4 1/2 inches; width, 3 inches; depth, 2 inches. No. 61. 15 cts. each, 6 for 75 cts., doz. \$1.30.



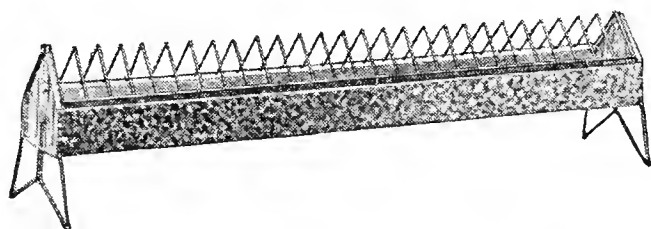
MaKomb All-Age Feeder-Waterer



A large-capacity Feeder that can be used from the day-old to the broiler stage. As the chicks grow, the Feeder can be elevated by means of the adjustable legs. Ends are securely welded, then soldered. The reel prevents chicks from roosting on the Feeder and has two adjustments. Trough is $4\frac{3}{8}$ inches wide, and $2\frac{1}{4}$ inches deep. Made of galvanized steel.

	Length	Each	Postpaid
No. 536.	36 in.	\$0 75	\$0 85
No. 548.	48 in.	95	1 10

MaKomb Grid Guard Growing Feeder

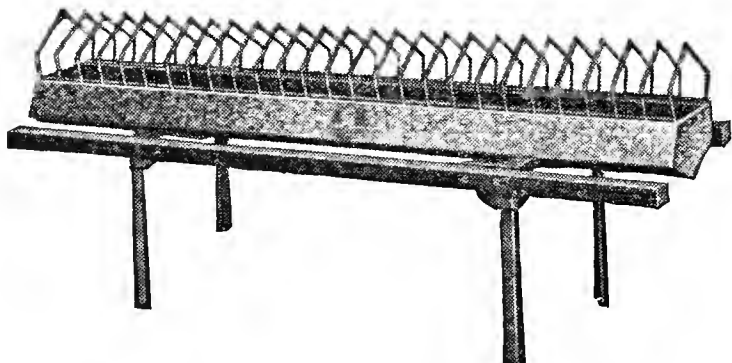


Latest in Broiler or Turkey Feeders. Has welded wire grid to prevent roosting and hinged to swing back for filling. Ends are die formed and welded. Trough is extra large, 6 inches wide and $3\frac{1}{4}$ inches deep and has wide flanged edge to prevent waste of feed. Heavy wire legs adjust quickly to a floor clearance of $4\frac{1}{2}$ inches.

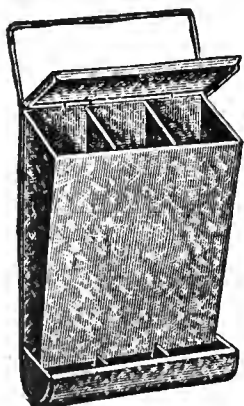
No. H6-2030. 30 in. long, \$1.10, postage 15 cts. extra.
No. H6-2048. 48 in. long, \$1.65, postage 20 cts. extra.

MaKomb Long Boy Feeder

Substantially built. Designed to save feed.



An ideal large-flock Feeder. It is substantially built and will give years of service. The trough, made of heavy galvanized steel, is $10\frac{1}{4}$ inches wide and $5\frac{1}{4}$ inches deep and has "V" center so mash will be eaten down to the last billful. The grid guard is of special design and is made of heavy wire. Stand is made of heavy angles and perches are comfortably wide. Length 5 feet; height 26 inches; total width 24 inches. No. 105. \$4.80.



Hoeft's Grit and Shell Box

There is no more economical method of supplying grit, ground shells, and charcoal than with these practical, inexpensive compartment boxes.

Made of heavy galvanized steel. Has 3 compartments, width $8\frac{1}{2}$ inches.

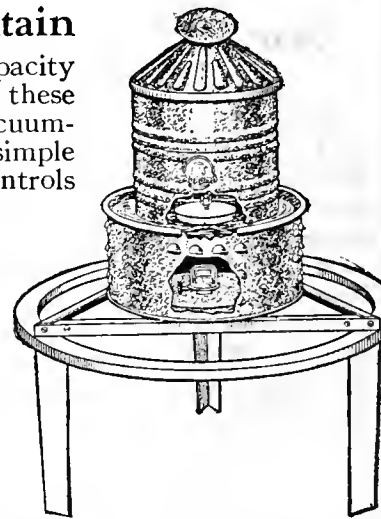
No. 9. 85 cts. each, postage 10 cts. extra.

Roofing

When you need roofing or roofing paint, remember we have it. Turn to page 108.

MaKomb Top-Fill Fountain

Quality construction and large capacity are the outstanding features of these Fountains. Made in two styles—vacuum-controlled and float-controlled. A simple valve of spring brass and rubber controls the water in the drinking-pan in the vacuum-controlled Fountain; in the float-controlled Fountain the float is mounted underneath the Fountain body, out of the way. These Fountains are built with the drinking-pan separate from the body. A loose drinking-pan is easier to clean, and the Fountain proper handles much better without a protruding pan. The Heater is furnished with a large lamp-bowl of sufficient capacity to hold enough oil to burn two weeks or more. The Stand is sturdily built and of simple design. Stand height, 14 inches.



Vacuum-controlled Fountain

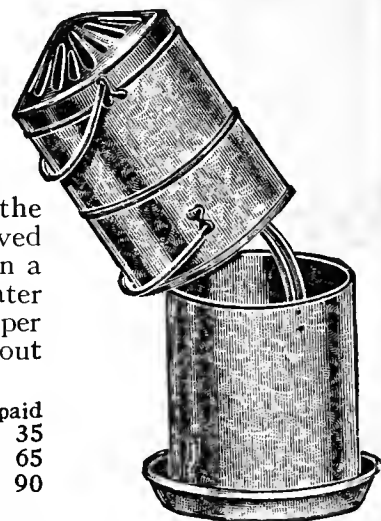
	Each
No. 194. 5-gal. Fountain, without Heater	\$2 75
No. 208. 8-gal. Fountain, without Heater	3 65
No. 196. 5-gal. Fountain, with Lamp Heater	4 60
No. 209. 8-gal. Fountain, with Lamp Heater	5 45

Float-controlled Fountain

No. 104. 5-gal. Fountain, without Heater	\$2 60
No. 118. 8-gal. Fountain, without Heater	3 25
No. 65. 5-gal. Fountain, with Lamp Heater	4 40
No. 78. 8-gal. Fountain, with Lamp Heater	5 20
No. 13. Stand for any of above Fountains, as shown in illustration	1 50

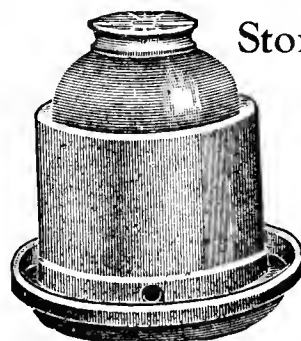
Hoeft's Monarch Cleanable Fountain

Fills from the top. Made of heavy galvanized steel, with double walls, which keeps the water cool in summer and retards freezing in winter. The outer cover telescopes snugly over the water container, and is easily removed for filling and cleaning. Operates on a simple vacuum principle and the water automatically remains at the proper level in the drinking-pan without danger of overflowing.



	Diam.	Pan	Each	Postpaid
No. 283. 3-gal.	13-in.		\$2 25	\$2 35
No. 284. 4-gal.	15-in.		2 50	2 65
No. 285. 5-gal.	15-in.		2 75	2 90
No. 288. Stand.	Height 14 in. (not illustrated)		2 25	2 40

Hoeft's Fountain Heater, described on opposite page, can be used with this Fountain, making it an ideal Fountain for winter use.



Stoneware Fountain
Be sure to specify which is wanted, Fountains or Feeders.

Stoneware Fountain and Feeder

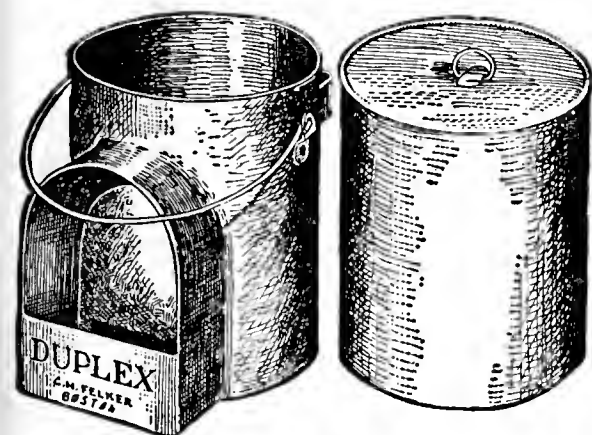
Made of best grade stoneware, highly glazed inside and out. Sanitary and easy to keep clean.

The Feeder has two large holes or openings and is intended for feeding buttermilk and sour milk.

PRICES for Fountains or Feeders:

	Each	Doz.
$\frac{1}{4}$ -gallon	\$0 35	\$3 75
$\frac{1}{2}$ -gallon	40	4 35
1-gallon	45	4 85
2-gallon	90	9 75

Shipping orders, 10 per cent additional for packing; minimum charge 25 cts.

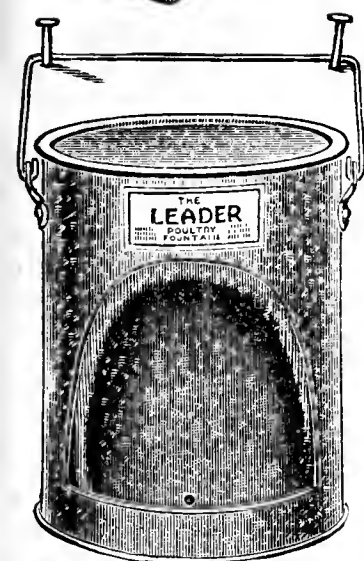


Duplex Fountain

An ideal Fountain for pigeons. Practical; sanitary. A double-wall fount, keeping the water clean and pure. Easy to fill. Easy to care for.

No. 210. 1-gal. \$1.15 each, \$1.30 postpaid.

No. 212. 2-gal. \$1.40 each, \$1.65 postpaid.

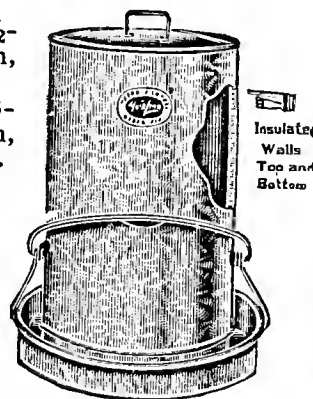


Leader Fountain

A very practical and sanitary Fountain at a low price. Made of heavy galvanized steel. Easy to clean and keep clean. Top section slides into bottom section. Works on the vacuum principle; no valves or springs to get out of order. The 3-gallon size has two large drinking-spaces.

No. 200. 1½-gal. 85 cts. each, \$1 postpaid.

No. 202. 3-gal. \$1.50 each, \$1.70 postpaid.

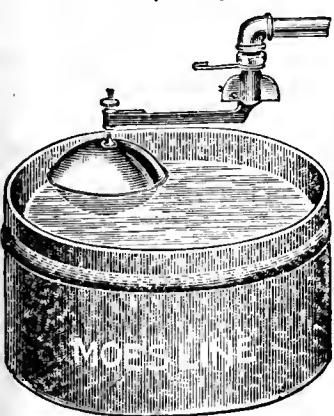


Monarch Insulated Fountain

Has double walls, including the bottom and top, all thoroughly insulated, and the only surface not insulated is the drinking-space, which of necessity must be left open.

Operates on the vacuum principle, so the water automatically flows to the pan and is kept at the proper level without overflowing. No valves, corks, floats, or complicated parts. A simple flat spring prevents overflow when filling. Diam. pan, 14 in. Capacity, 4 gals.

No. 54. \$4.50.



Moe's Automatic Fountain

A perfect automatic valve and float, to regulate the flow of water to a drinking-dish.

The valve is threaded for ¼-inch iron pipe and can be attached to any pressure system, or to a barrel or tank, and insures a continuous, automatic supply of water, without waste.

No. 30. Automatic Valve and Float only. 95 cts., postpaid \$1.05; 6 for \$5.25.

Hoeft's Trap Nest Front

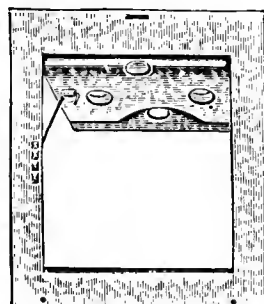
An inexpensive and useful device which meets a popular demand.

Made of best quality galvanized iron, it is simple in operation, and effectively traps the hen, yet allows ample ventilation.

Can be easily attached to any suitable wood-box or nest.

Door is hinged, making it easy to remove the hen or clean the nest. 11 in. wide by 12 in. high. Size of opening 8 in. by 9 in. Illustration shows attachment in open position.

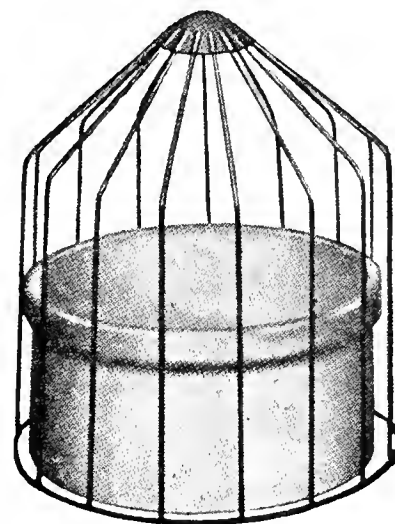
No. 63. 55 cts. each, postpaid 60 cts.; \$6 per doz., postpaid \$6.35.



Nu-Way Feeder and Fountain

A very satisfactory way of supplying grown fowls, turkeys, and pigeons with water, butter-milk, wet mash, and feeds of every kind without waste. The pan is made of stoneware and the canopy of heavy galvanized iron. Capacity, 2 gals.

No. 10. \$1.25.



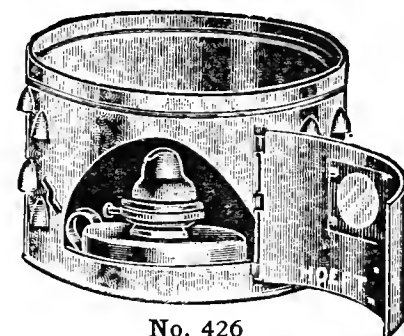
Hoeft's Fountain Heater

Can be used with almost any type of fountain, and effectively prevents water from freezing.

Made of galvanized steel, with a hinged door and secure fastener. Mica window. Heavy terne plate bowl, and Zenith no-chimney burner.

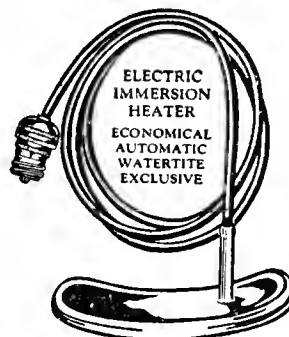
It is also an excellent Heater for small brooder.

The lamp-fount or bowl holds sufficient kerosene to burn continuously for seven days. Simple and safe. Four sizes.



No. 426

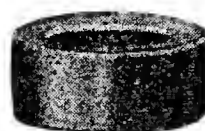
	Each	Postpaid
No. 10. Diam. 11 in., ht. 7 in. Closed top	\$1 95	\$2 05
No. 426. Diam. 13 in., ht. 9 in. Open top	2 00	2 15
No. 428. Diam. 15 in., ht. 9 in. Open top	2 25	2 40
No. 427. Diam. 17 in., ht. 8 ¾ in. Open top	2 50	2 65



MaKomb Electric Immersion Heater

Can be used in any fountain, pail, or trough. Will hold water at 50° to 55° automatically. Uses about ½ K.W. hour in 24 hours. Case of heavy tinned copper, housing best element in porcelain cover.

No. M7-W. \$3.



Stoneware Rabbit Feeder and Waterer

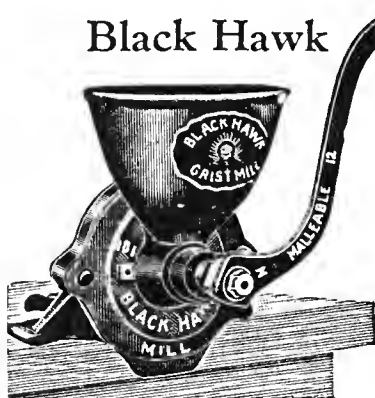
Made of high-grade stoneware. White glazed. Suitable for dogs or rabbits.

	Each	Doz.
No. 1. Feeder. 5½-in. diam., 2½ in. deep; rolled edge	\$0 15	\$1 65
No. 2. Feeder. 7¼-in. diam., 2½ in. deep; rolled edge	20	2 00
No. 3. Feeder. 7½-in. diam., 3 in. deep; straight side	30	3 25
No. 4. Waterer. 6½-in. diam., 3 in. deep; flared side	20	2 00

Incubator and Brooder Extras

	Each	Postpaid
No. 100 Lamp Bowl, capacity 1 pt.	\$0 50	\$0 60
No. 101 Lamp Bowl, capacity 1 qt.	60	70
No. 102 Lamp Bowl, capacity 2 qts.	75	85
No. 200 Zenith Burner. Uses 5/8-inch wick	60	65
No. 201 Zenith Burner. Uses 7/8-inch wick	75	80
No. 211 Zenith Burner. Uses 1½-inch wick	1 00	1 05
No. 202. Sun Hinge Burner. Uses 7/8-inch wick	40	45
No. 212. Sun Hinge Burner. Uses 7/8-inch wick	60	65
No. 203. Sun Hinge Burner. Uses 1½-inch wick	60	65
Metal Chimney	20	25
No. 208 Red Felt Wicks. 5/8-in. width. Dozen		25
No. 209 Red Felt Wicks. 7/8-in. width. Dozen		45
No. 210 Red Felt Wicks. 1½-in. width. Dozen		55
Wafers for Wafer Regulator, 3-in.	30	35
Wafers for Wafer Regulator, 4-in.	40	45
Wafers for Wafer Regulator, 5-in.	50	55

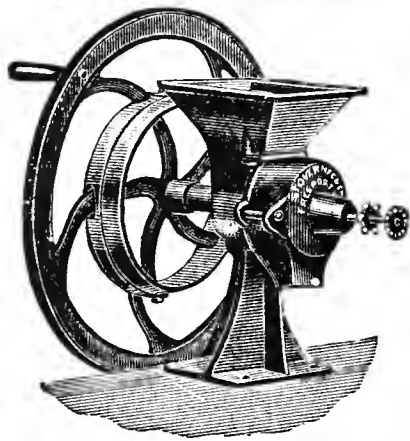
Black Hawk Grist Mill



With a Black Hawk Mill you can crack corn or grind any kind of grain to whatever degree of fineness will best suit the age or condition of your fowls.

Grinds corn into meal, wheat into graham flour, rice or buckwheat into flour; in fact, an all-round household Mill that will grind fine or coarse. Price \$3.50.

Stover Grinding Mill



No. 35-B. Stover Hand and Power Mill

In this Mill are embodied all the good features of other hand grinding Mills to which have been added universal burrs or grinding plates that are adjustable for grinding coarse or fine. This machine grinds oats, barley, rye, corn, peas, etc., for feeding to poultry. It is a well-designed machine, is strong and well made throughout and of excellent finish, has a 16-inch fly-wheel and is light running.

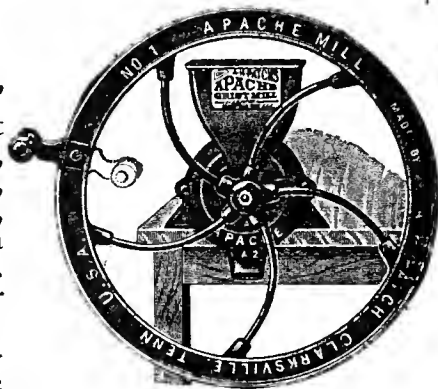
No. 32. Hand Power, capacity 1 to 2 bushels per hour. Price \$5.35.

No. 35-B. Hand and Power, capacity 2 to 4 bushels per hour. Price \$9.95.

Apache Grist Mill

The Apache is an "all-round" Mill of large capacity, suitable not only for grinding chicken-feed, but ideal for making cornmeal, graham flour, rye flour, hominy, etc., for table use. It will grind a quart of meal in three minutes. Has perfect adjustment for fine or coarse work.

The large fly-wheel, large hopper, ball-bearings, and adjustable regulator, make the Apache the lightest running, fastest grinding, and most easily operated Mill on the market. Well built and will last a lifetime. Price \$7.50.



Jumbo Power Feed Mill

Grinds Ten to Twenty Bushels of Grain an Hour. Grinds the Grain Fine and Grinds It Fast

You can grind oats, rye, barley, shelled corn, and wheat with little power and at practically no cost. Simple screw adjustment enables you to grind grain just as fine or as coarse as your needs demand.

Built of steel and iron throughout, with long and well-babbitted bearings. Safety springs protect burrs from nails, nuts, etc., and keep burrs apart when machine is running empty.

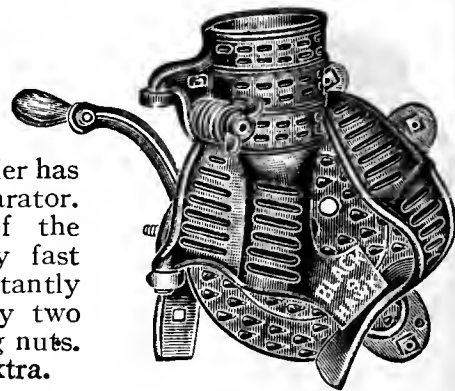
One set of fine burrs, also one set of coarse burrs furnished with each machine. Pulley 6-inch diameter by 3½-inch face, gives proper speed for operation with any engine or light plant. Speed 290 to 1,150 R. P. M. Burrs 6 inches. Weight 90 pounds. Height 33 inches. Power required, 1½ to 5 horse-power. Price \$17.

Larger Grinding Mills are shown on page 104



Black Hawk Corn Sheller

The Black Hawk Corn Sheller has enclosed hopper and separator. This prevents scattering of the shelled corn. A wonderfully fast and easy-running Sheller. Instantly fastened to barrel or box by two large strong clamps with wing nuts. Price \$3.25, postage 30 cts. extra.

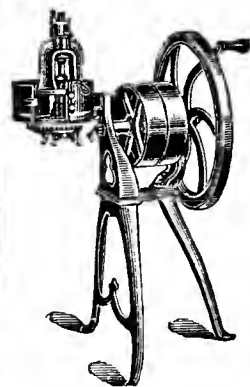


Banner Root-Cutter

Vegetables, such as cabbage, carrots, turnips, mangels, beets, and potatoes furnish the essential green-food vitamins during the winter months. With a Banner Cutter to quickly and easily cut and shred vegetables, the poultry-raiser is fully equipped to keep up his green-feed rations during the winter months. Enough feed for a large flock of birds can be cut in two to five minutes. No. 7. \$7.85.



Mann's Green Bone-Cutters



The poultry-raiser wants eggs, and wants them when eggs are worth the most. Green bone and raw meat produce them. There is no doubt about that. Experience proves it; science shows why. Mann's Green Bone-Cutters have been sold for many years, and they are by far the best Bone-Cutters on the market today. Every machine is guaranteed, and must do the work. Send for complete Catalogue if you wish to know more about them.

No. 5-B. Hand Bone-Cutter designed for small flocks. Weight 60 lbs. Price \$15.

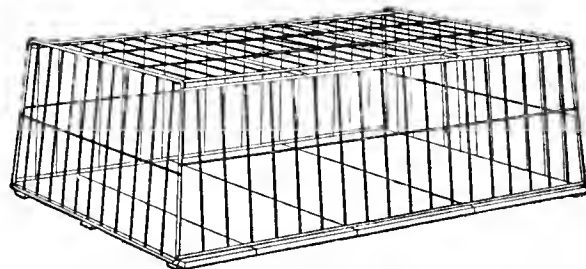
No. 7½. Combination Hand and Power. Can be run either way without change of parts. Weight 130 lbs. Price \$28.

No. 7. Hand Bone-Cutter designed for flocks of 25 to 100. Weight 107 lbs. Price \$19.75.

No. 11. Combination Hand and Power. Intended for large flocks when the machine must be run by hand a portion of the time. Price \$45.

No. 12. An all-power Bone-Cutter where large quantities of bone are to be cut. Capacity from 120 to 150 pounds per hour. Weight 261 lbs. Price \$65.

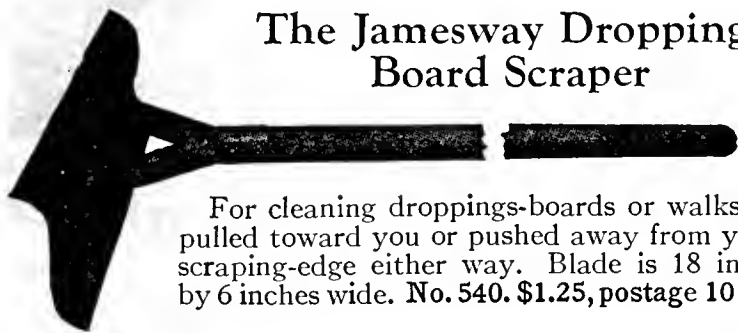
The Pittsburgh Shipping Coop



The most serviceable, sanitary, and durable Shipping Coop on the market. Made of the best galvanized steel bars and wire electrically welded together and sufficiently stayed to make it rigid throughout. The bottom is made of the best seasoned wood and is assembled by the floor-boards being stapled to three cross sections and reinforced with cleats on top.

No. 1204. Standard Size. 27 x 41 x 14 inches high.....\$3 35
No. 1203. Turkey Size. 27 x 41 x 20 inches high.....3 90

The Jamesway Droppings Board Scraper



For cleaning droppings-boards or walks. Can be pulled toward you or pushed away from you. Keen scraping-edge either way. Blade is 18 inches long by 6 inches wide. No. 540. \$1.25, postage 10 cts. extra.

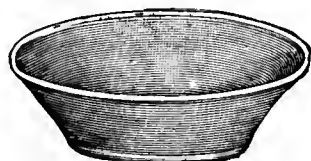
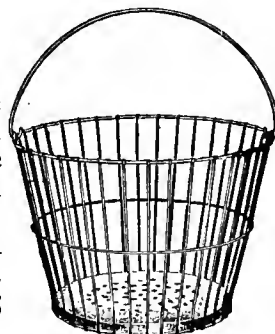
Oakes Poultry-House Scraper

Shaped with a sharp angle at each end of scraping edge so as to get into corners and cracks. Heavy steel blade, 13 inches long, held rigid to handle by heavy, malleable braces. No. 995. \$1.35, postage 20 cts. extra.

Oakes Egg-Cooling Basket

For gathering and quick cooling of eggs. The quicker the eggs can be cooled, the better they will be. Clean, fresh-flavored eggs always bring premium prices. Store eggs in wire Cooling Baskets in a room temperature of 60 degrees for best results.

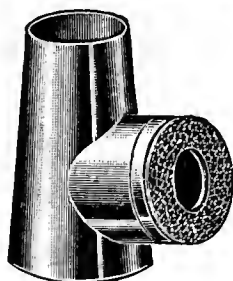
Made of galvanized wire with perforated metal bottom. Very sturdy and substantial. No. 15. 90 cts. each, postage 10 cts. extra; 6 for \$5.



Clay Pigeon Nest

Unglazed. Heavy Bottom.

9-in. diameter, 20 cts. each, doz. \$2.



Hoeft's Egg-Tester

Used with an ordinary lamp (No. 2 burner) in a dark room.

It will illuminate the interior of the egg, and show if the chick is alive, and also show the size of air-cell in the egg.

No. 48. Hoeft's Egg-Tester. 25 cts. each, postage 10 cts. extra.

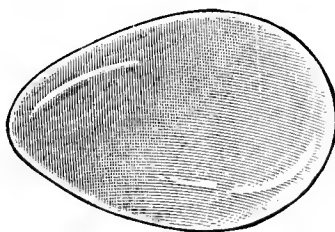
Glass Nest-Egg

Natural in appearance and uniform in size. Will not easily break.

They induce the hen to lay where she should—in the nests provided for her.

Hen size, 4 for 10 cts.; 20 cts. per doz.; postpaid, 30 cts. per doz.

Pigeon size, 5 cts. each; 40 cts. per doz.; postpaid, 50 cts. per doz.

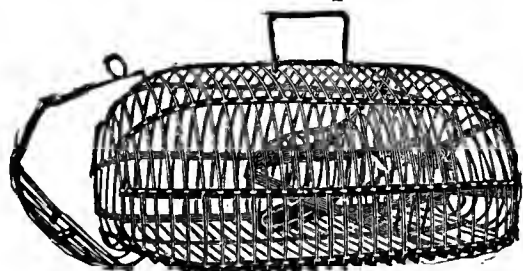


Lime Nest-Egg

They look like real hens' eggs. Made from pure sterilized sulphate of lime. This product is well known among poultry-raisers for its value in keeping nests in a clean, healthful condition.

They do not break or crumble or absorb and hold the cold. Price, 3 for 10 cts.; 30 cts. per doz.; postpaid, 40 cts. per doz.

Surprise Rat Trap



This Trap is very strongly made, having more stiffening ribs and cross-wires than Traps of similar pattern. Made of No. 17 coppered wire, 16 in. long, 9 in. wide, 7 in. high. 90 cts., postpaid \$1.

Moe's Aluminum Leg-Bands



Made of sheet aluminum, with large raised numbers, easy to read from a distance. Adjustable for any size fowl. Accurately made and quickly applied.

Packed in paper cartons of 12, 25, 50 and 100 Bands each. Numbered from 1 to 9,999. Prices postpaid.

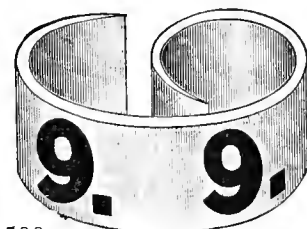
12 Bands.....	\$0 15	100 Bands.....	\$0 65
25 Bands.....	25	500 Bands.....	3 00
50 Bands.....	40	1,000 Bands.....	5 50

Bandettes (Colored Celluloid Leg-Bands)

Bandettes are easily and quickly applied. Made of special spring celluloid.

Furnished in six colors—Blue, Red, Yellow, Green, Cerise (Pink), and White. Colors are fast and will not fade.

Sold only in unbroken sets of 25 of one color.



No. 4. For Baby Chicks. Numbered 1 to 500.

No. 6. For Pigeons. Numbered 1 to 500.

No. 9. For Leghorns. Numbered 1 to 3,000.

No. 11. For American Breeds. Numbered 1 to 2,000.

No. 12. For Asiatics. Numbered 1 to 500.

Nos. 4 and 6	Postpaid	Nos. 9, 11, and 12	Postpaid
25 Bands.....	\$0 50	25 Bands.....	\$0 65
50 Bands.....	90	50 Bands.....	1 15
100 Bands.....	1 60	100 Bands.....	2 10
250 Bands.....	3 75	250 Bands.....	4 75
500 Bands.....	7 00	500 Bands.....	9 00

Perfecto Spiral Leg-Bands

KNOW YOUR HENS ON SIGHT

In ten colors—Red, Green, Purple, Black, White, Pink, Yellow, Ruby, Light Blue, and Dark Blue.



Mark each bird for its pen. Give each pen a different color. Mark old birds and pullets differently and know what you are doing.

No. 0. 7/8-in. diam. for Turkeys.

No. 1. 3/4-in. diam. for Asiatic Breeds.

No. 2. 1 1/8-in. diam. for American Breeds.

No. 3. 1 1/4-in. diam. for Leghorns.

No. 4. 1 1/2-in. diam. for Bantams.

No. 5. 1 3/4-in. diam. for Pigeons.

No. 6. 2-in. diam. for Baby Chicks.

Prices, postpaid	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
25 Bands	\$0 30	\$0 25	\$0 25	\$0 20	\$0 15	\$0 15	\$0 15
50 Bands	50	45	40	35	25	20	20
100 Bands	90	75	65	60	45	35	35
500 Bands	4 00	3 25	2 75	2 50	1 75	1 50	1 45
1,000 Bands	7 50	6 00	5 00	4 50	3 00	2 50	2 40

Thermometers and Hygrometers

FOR INCUBATORS AND BROODERS. ACCURATE AND DEPENDABLE



Wilder Moisture Gauge for Incubators. No. 2



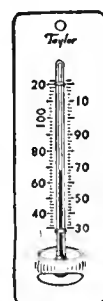
136



1112

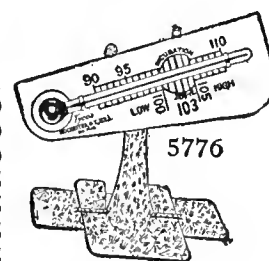


5792

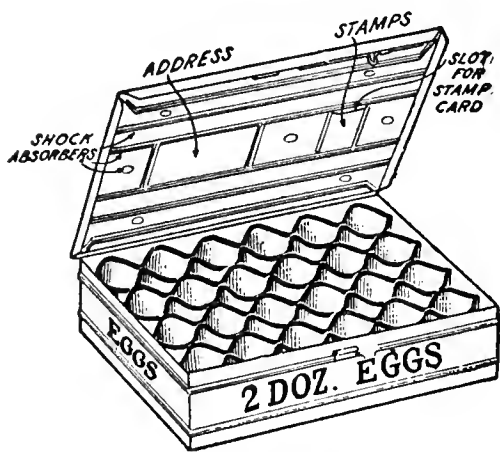


5794

No.	Postpaid
5776. Taylor Incubator Thermometer, with stand.....	\$0 90
5794. Brooder Thermometer.....	60
5792. Brooder Thermometer.....	90
1112. Brooder Thermometer.....	55
136. Brooder Thermometer.....	55
2. Wilder Moisture Gauge.....	1 35
5796. Incubator Hygrometer.....	1 75



Aluminized Metal Egg-Crate



Solves every problem of shipping eggs and butter and other soft products by mail. Built for continued use; practically indestructible; lasts for years. No wrapping is required. A permanent lock pin attached to the crate holds the lid rigidly closed. Fillers have metal edge. Reversible address cards visible through opening in lid. Names of shipper and receiver are placed on each side of this card.

Weight without eggs	Each	Postpaid	Weight without eggs	Each	Postpaid
1-doz. size. 2 lbs.	\$1 00	\$1 10	4-doz. size. 5 lbs.	\$1 75	\$1 88
2-doz. size. 3 lbs.	1 25	1 36	6-doz. size. 6 lbs.	2 00	2 14
3-doz. size. 4 lbs.	1 50	1 62	12-doz. size. 11 lbs.	3 00	3 19

"Egg-Pak" Fibre Egg-Case

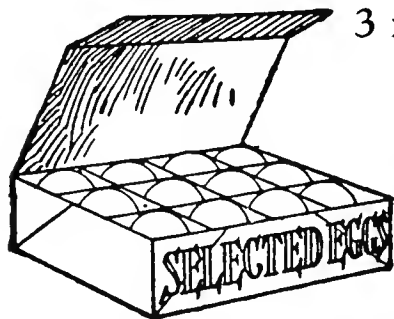
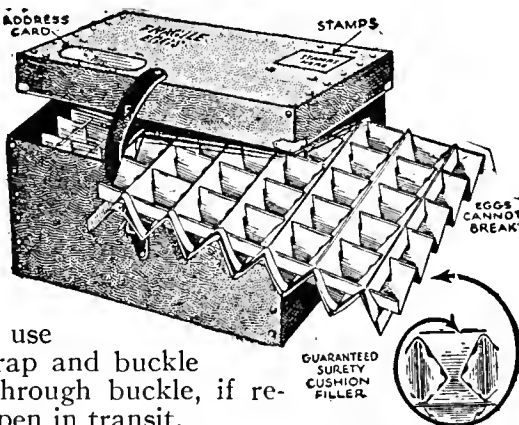
ELIMINATES ALL EGG-BREAKAGE

Made of indestructible fibre, riveted together like steel girders. Eggs shipped in "Egg-Pak" will always arrive in the same condition in which they left. Has reversible address card holder and stamp space and patented "Surety Cushion" fillers.

Easily closed by the use of a genuine cowhide strap and buckle piece. May be sealed through buckle, if required. Buckle cannot open in transit.

Weight without eggs	Each	Postpaid	Weight without eggs	Each	Postpaid
2-doz. size. 2½ lbs.	\$2 20	\$2 31	8-doz. size. 5 lbs.	\$3 25	\$3 38
4-doz. size. 3½ lbs.	2 80	2 92	12-doz. size. 6½ lbs.	4 00	4 15
6-doz. size. 4 lbs.	3 15	3 27			

Extra trays, 24-25-egg size, 25 cts. per tray



3 x 4 Folding Egg Carton

One-dozen size. No printing

This is the regulation Folding Egg Carton, used where eggs are delivered direct to customers. It is not a parcel-post box.

	Postpaid	Postpaid
12 Boxes.....	\$0 15	\$0 25
50 Boxes.....	50	70
125 Boxes.....	1 00	1 25
250 Boxes.....	1 85	2 30
500 Boxes.....	3 50	4 35
1,000 Boxes.....	6 50	Not ppd.

2 x 6 Folding Egg Carton

Holds one dozen eggs and made with full-cushion filler, giving full protection to the eggs, and long front flap, which gives a rigid top to the box. Not suitable for parcel post use.

	Postpaid	Postpaid
12 Cartons.....	\$0 25	\$0 35
50 Cartons.....	85	1 05
100 Cartons.....	1 50	1 80
250 Cartons.....	\$3 15	\$3 75
500 Cartons.....	6 00	7 10
1,000 Cartons.....	11 50	Not ppd.

Humpty Dumpty Egg-Carrier

Constructed to withstand hard knocks; easy to pack and unpack, easy to carry. Can be used over and over again. Furnished complete with fillers.

	Each	Postpaid		Each	Postpaid
3-doz. size.....	\$0 45	\$0 55	15-doz. size.....	\$0 65	\$0 85
6-doz. size.....	55	65	30-doz. size.....	1 00	1 25
12-doz. size.....	60	75			

Egg-Case Fillers, 20 cts. per doz., postpaid 30 cts. Case of 125 three-dozen size fillers, \$1.25.

Cushion Flats, 20 cts. per doz.; \$1.25 per 100, postpaid \$1.50. These can also be used in the regulation Egg-Cases.

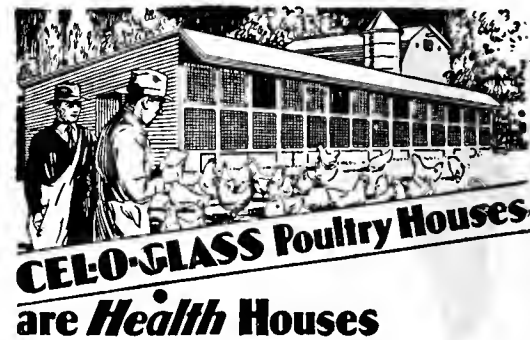
Cel-O-Glass

Use Cel-O-Glass for more eggs all winter long. Cel-O-Glass brings the all-important ultra-violet rays indoors; keeps houses warmer, prevents rickets, reduces chick losses.

This time-tested profit-maker for poultry raisers and farmers is now guaranteed to give 5 years' service when correctly installed.

36-in. width	28-in. width	30-in. width	28-in. width
100 lineal feet. \$40 50	\$31 50	10 lineal feet. \$4 50	\$3 50
50 lineal feet. 20 75	16 25	5 lineal feet. 2 50	1 90
25 lineal feet. 10 75	8 40		

Cel-O-Glass Refix. For repairing punctures in Cel-O-Glass. ½ pt. 45 cts.; pt. 75 cts.



Genuine Glass Cloth

A strong fabric treated by a patented process to make it translucent, weather-proof, and water-proof. It readily transmits the life-giving, vitalizing ultra-violet rays of the sun. These are the health rays of sunlight and are absolutely needed by poultry in winter months. Easily put up. In rolls 36 inches wide.

100-yd. roll, 900 sq. ft....	\$25 00	15-yd. roll, 135 sq. ft.....	\$3 90
50-yd. roll, 450 sq. ft....	12 50	10-yd. roll, 90 sq. ft.....	2 70
Less than 10 yds., per yd.....			30

Storm King Lantern

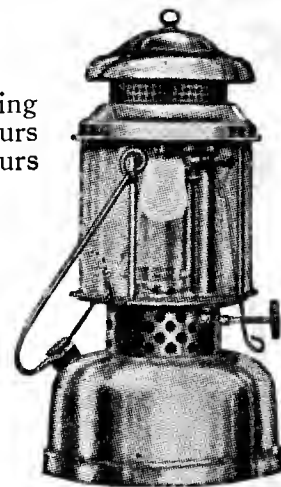
350 CANDLE-POWER

Get more eggs by hanging a Storm King Lantern in your poultry-house a few hours each night and morning—longer feeding hours increase the egg-yield.

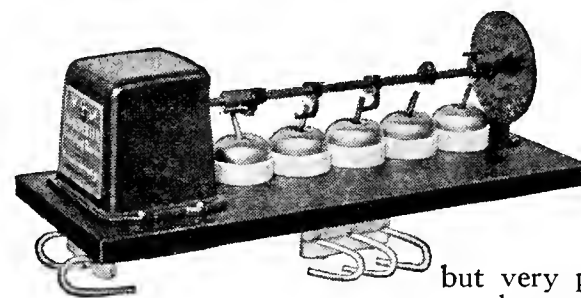
The Storm King makes and burns its own gas from common motor gasoline. Absolutely safe. Burns in any position and in any wind.

Capacity of fount, 1 quart—burns 12 to 15 hours on one filling. Height 13 inches, weight 4 pounds. Equipped with Mica Chimney, 1 No. 1A Rag Mantle, and all accessories.

Price \$5.75, postpaid.



The Never-Fail Electric Time Switch



This simple but remarkable device automatically turns electric lights on or off at the exact time you wish it done. Cams on a cam-shaft connected to a small

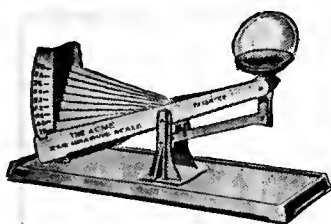
but very powerful and durable synchronous motor operate the switches. Can be located in the home or any other building. For use with alternating current, 120 volts. Complete instructions are sent with each machine.

No. 22. Turns bright lights on and off. Two operations.....	\$13 50
No. 33. Turns bright and dim lights on and off. Four operations.....	15 00
No. 55. Controls bright and dim lights evenings and bright lights mornings.....	16 50

Blue Ribbon Chick Box

A safe and convenient carrier for shipping baby chicks either by express or parcel post. Prices include staples, ready for assembling.

25-Chick size. 11 x 9 x 5½ in. 15 cts. each, postpaid 25 cts.; doz. \$1.45, postpaid \$1.70.	
50-Chick size. 18 x 11 x 5½ in. 20 cts. each, postpaid 30 cts.; doz. \$2.10, postpaid \$2.40.	
100-Chick size. 22 x 18 x 5½ in. 30 cts. each, postpaid 40 cts.; doz. \$3.10, postpaid \$3.50.	



Acme Egg-Grading Scale

It is made entirely of aluminum, which makes it rustproof and practically indestructible. No springs or weights used in its construction. By placing an egg in the cup, the beam will automatically adjust itself. The lowest visible number on the blades will indicate the weight in

ounces of one dozen like eggs.

Accurately grades all eggs ranging from 19 ounces to 30 ounces per doz. \$2.50, postpaid.

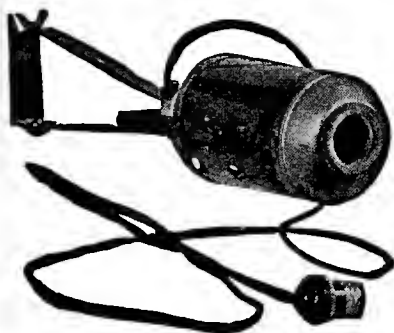
Oakes Egg-Scale

A real Egg-Scale—accurate, dependable, and fast. Angle dial is easy to read. Individual egg-weight and weight per dozen are indicated on the double dial. Dial is black with figures in white.

Egg-cup, lever parts, and counterweight are chromium plated. Bearing-pins are brass. No. 20S. \$1.50, postpaid.



Reliable Standard Egg Candler



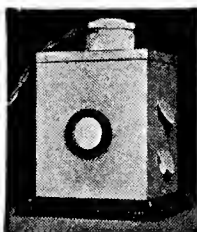
Especially adapted for produce houses where a stationary Candler is most desirable. It is equipped with a wall bracket and so arranged that it swings on a pivot either right or left. The Candler proper is also adjustable and can be set at any degree most convenient to the operator. The powerful light bulb shows all defects in the egg instantly.

No. 600. Complete, including

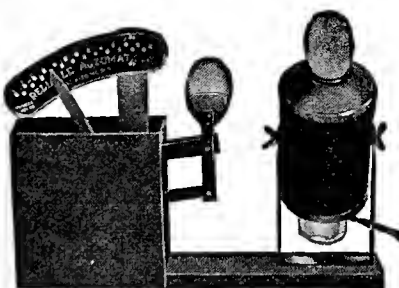
Cord, Socket, and Bulb. \$1.80, postpaid.

Reliable Reflecto Egg Candler

This Candler is quick in action and shows every defect in the egg instantly. It is equipped with a reflector that adds to the illumination of the entire egg, making it quick and thorough in candling. Can be attached to any light-socket. Complete, including cord and socket for 110 voltage. No. 700. \$1.30, postpaid.



Reliable "Candel-Web" Combination



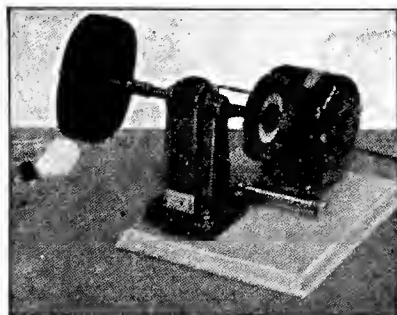
A combination Egg-Scale and Egg-Candler. This combination makes it convenient for the operator to grade and candle eggs without extra handling.

The scale is automatic in operation, and indicator arm points to exact weight of eggs per dozen. Graduated from 16 to 40 ounces to the dozen eggs.

Candling can be done at any angle. Equipped with a 60-watt bulb for 110 voltage, complete with cord, sockets, and bulb. No. 550. \$3, postpaid.

Perfect Dry Egg Cleaner

Clean eggs means premium prices and extra profits. The Perfect Dry Egg Cleaner is the fastest Cleaner ever offered at a low price. It is unusually well built and will last for years. Furnished complete with 110-volt A.C. motor and egg-buffer. \$10.95, postpaid.



Caponizers

Large profits await the raiser of capons. Pilling's instruments are the acknowledged leaders in this line.



New Philadelphia Caponizing Set

This set has many admirers. It consists of a knife, for making the incision; the spreader, for holding sides open; sharp hook, for piercing skin; the Lansdowne Remover, for removing the testicles. Cords with hooks are for holding the bird. Cup forceps for removing any foreign matter. Prices (postpaid), in velvet-lined case \$3.50; in pasteboard box \$3.

PILLING SPECIAL CAPONIZING SET. Used just the same as other Caponizing Sets, except the Testicle Remover cuts, like a pair of scissors, the cord of the testicle clean and clear as a whistle. In oak case with full, easy-to-use directions. \$5, postpaid.

French Poultry-Killing Knife



Price 60 cts., postpaid

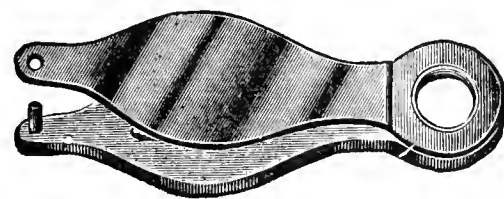
SAFE-EDGE KILLING KNIFE. Exactly same as French Killer except cut on one side only. 60 cts., postpaid.

PILLING ANGULAR KILLING KNIFE. By simply turning the wrist the jugular vein and spinal cord are cut. 60 cts., postpaid.

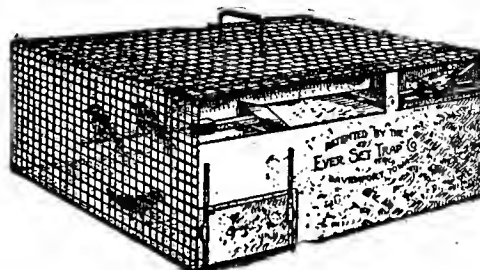
All Killing Knives are made of finely tempered instrument steel with nicked handle.

Moe's Standard Poultry-Punch

A practical Punch for marking baby chicks. All steel, nickel-plated, punches clean, hole is right size, will not bruise the foot. 15 cts., postpaid.



Ever-Set Sparrow Trap



They have been fully tried out and have caught as high as 65 sparrows in one day in summer, and 40 in one day in winter in a single trap.

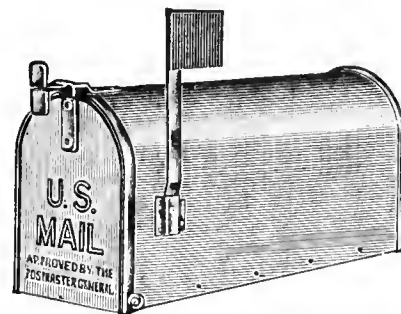
Size of trap 18 x 18 x 12 inches, with 3 x 5 x 18-inch receiving-cage (for drowning) with complete

instructions. Made of 1/2-inch galvanized hardware cloth.

To the Farmer and Poultryman. Fifty sparrows eat daily the equivalent of a quart of wheat. Very likely you have many more than 50 sparrows fattening on the high-priced feed that you intended for your poultry. Without stopping to figure, it is clear that an Ever-Set Trap pays for itself in a very short time. \$3.25, postpaid.

Superior Rural Mail-Box

This Mail-Box is of the highest standard of workmanship and excellence of finish. It is absolutely proof against all weather. Opens at end with door hinged at bottom. Made of galvanized steel. Conforms to the latest postal regulations.



No. 1. 18 1/2 x 6 1/4 x 7 1/2 inches high.....\$1 10
No. 2. 23 1/8 x 11 x 13 3/8 inches high.....2 65



Raise Every Chick with *Conkeys* Y-O FEEDS

Conkeys Y-O Starting Feed

For low mortality, rapid growth, and no leg-weakness (rickets), feed Conkeys Y-O Starting Feed. It is high in digestible nutrients and low in fiber. Avoid untested, unbalanced, so-called "cheap" feeds—they're dangerous. Use Conkeys—"It fills the bill."

Approximate Analysis: Protein 16%; Fat 4.5%; Fiber 5%; N. F. E. 55%; Carbo. 60%.



Conkeys Y-O Growing Mash



If the growing pullets at any time lack vitamins A, B, D, E, and G, the result will be slow-developing, undersized birds. For this reason, Y-O is mixed in Conkeys Growing Mash. Y-O contains cod-liver oil combined with brewers yeast. It insures, in a potent and lasting form, the A, B, D, E, and G vitamins so necessary for the growing stock. This mash supplies all necessary materials for strong frames and solid flesh.

Approximate Analysis: Protein 18%; Fat 5%; Fiber 7%; N. F. E. 50%; Carbo. 57%.

Conkeys Y-O Egg Mash

A High-grade Egg Mash at a Surprisingly Low Price

This feed is composed of buttermilk, meat, bone, and wholesome grains in precisely the right proportion to keep your flock in prime condition and make them lay. Remember, a properly balanced feed is the secret of heavy egg-production. If your hens haven't exactly the ingredients required, they simply won't lay. Conkeys Y-O Egg Mash is the result of years of study and tests. Feed it for economical egg-production.

Approximate Analysis: Protein 20%; Fat 5%; Fiber 7%; N. F. E. 46%; Carbo. 53%.

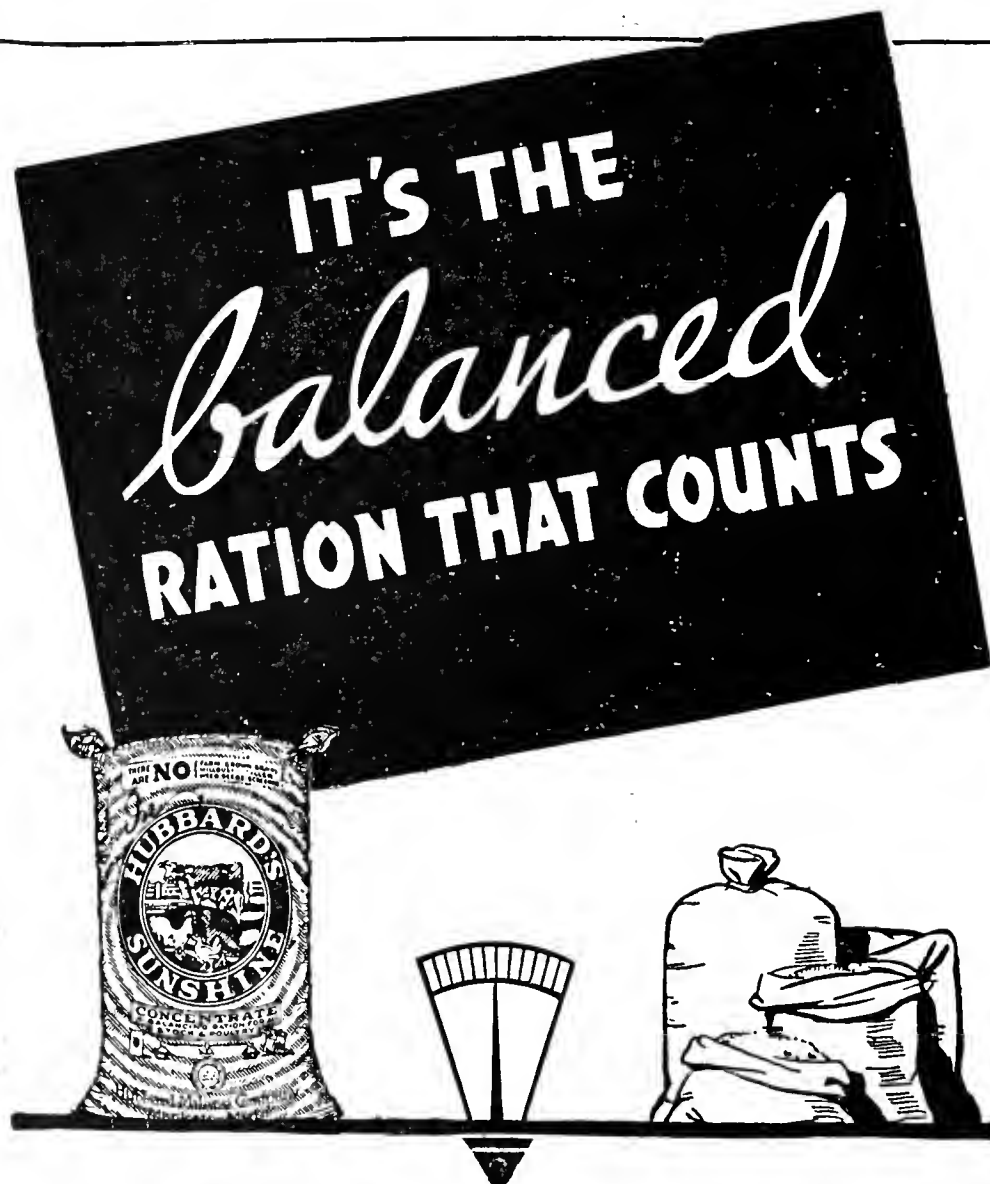


Conkeys Chick Grains

Just the thing to feed in connection with Conkeys Y-O Starting Feed after the chicks are two to three weeks old.

Conkeys Growing Grains

Cracked grains, larger in size than Chick Grains, and balanced especially for growing birds.



for all . . .

LIVESTOCK and POULTRY

Whether it's raising chickens or turkeys, fattening hogs or cattle for market, there's a HUBBARD'S SUNSHINE Feed or Mash for every purpose.

Successful feeders everywhere are feeding the HUBBARD'S SUNSHINE way. It is their assurance of feeding balanced rations at lower feeding costs and with greater profits.

HUBBARD'S SUNSHINE

Turkey Starter Turkey Grower

Balanced turkey rations that finish birds earlier and put on premium flesh that brings those extra cents a pound on the market.

HUBBARD'S SUNSHINE

*Chick Starter Chick Grower
Egg Mash*

Balanced mashes that put poultry on a profit-paying basis. Feed for increased livability of chicks, healthier flocks, earlier and heavier layers, and longer laying seasons.

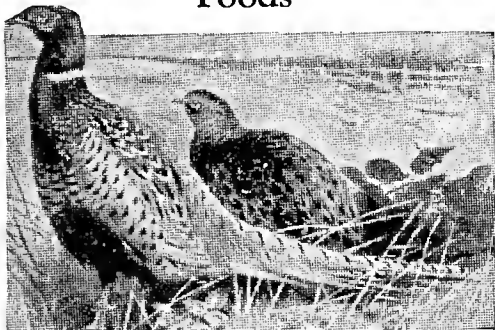
"Chamberlain's Perfect" Chick Starter and Developing Feed
Nature's food for Baby Chicks, Turkey Poults, Bantams, Pheasants, and Ducklings



This original and scientifically correct starting-food is the only dry, granular, baby chick food with animal proteins, buttermilk, and cod-liver oil—all complete in one sack.

It is a wheat and oatmeal basis food, having ground meat, bone, charcoal, and all other essential ingredients. No corn—made right—no bowel trouble.

Spratt's Pheasant and Quail Foods



Prepared strictly according to modern scientific methods and is the result of careful and exhaustive experiments.

It has been demonstrated that to rear birds successfully they must have, while very young, a cooked food. Spratt's Pheasant Meal is composed of cereals, meat, vegetable, bone, and shell in judicious combination. No. 3 Coarse (for adult birds); No. 5 Medium (after three weeks old); No. 12 Fine (before three weeks old).

Ask for free copy of Spratt's Pheasant and Quail Bulletin

Belle Brand Oyster Shells

Crushed Oyster Shells should be kept where the fowls can have easy access to them all the year round. They supply carbonate of lime in natural form, act as a grit, and produce a firm, hard shell. Belle Brand shells are dry, and, having been carefully screened, are free from dust and dirt.

Darling's Steamed Bone-Meal

Rich in available phosphates, and suited to the mineral requirements of all live-stock and poultry. It is finely ground for convenience in mash mixtures and is especially valuable during growing and moulting periods for poultry. As a part of dairy cattle and hog rations, it provides minerals in an organic form that are readily absorbed by the body system.

"Nestco" Buttermilk

A life-saver for chicks. Promotes rapid, healthy growth. Unequaled as an egg-producer for pullets and hens. Feed it regularly and watch your young stock grow and develop into active, healthy birds. It can be fed with safety in any quantity to all poultry, regardless of age. Nestco Buttermilk is well known for its quality and freshness.

Yankee Brand Dried Buttermilk

It contains everything found in whole milk, and whole milk is universally recognized as the best food for man or animal. It contains no fibre. Every ounce of it is utilized in maintaining and building animal tissues, as it contains the most valuable constituents of all foods. Contains 32 to 33 per cent milk protein and 5 per cent fat.

Yankee Brand Dry Skim-Milk

A sweet, cream-colored powder, rich in vitamins and almost totally soluble in water. It carries an average analysis of 32 per cent protein, and contains no fibre. One hundred pounds of Dry Skim-Milk represents the total milk solids found in 1,200 pounds of liquid skim-milk, and supplies the vitamins, protein, and mineral matter (especially calcium) which are essential in the diet of all young animals for rapid growth.

Kraco Dried Whey

"Kraco" is made from liquid whey and contains the valuable milk-minerals needed in a poultry-feed. It does not destroy the balance of your feed-ration.

For Baby Chicks. Feed $7\frac{1}{2}$ per cent "Kraco" and see how greedily they eat their mash.

For Growing Birds. Feed them 5 per cent "Kraco."

For Laying Hens. Three per cent "Kraco" Dried Whey keeps layers in the best of condition.

For Coccidiosis. When this disease starts, stop it quickly by using 25 per cent "Kraco" for a few days.

"Moreggs"

(50% Meat and Bone Scrap)

Obtained from freshly rendered meat trimmings. It is completely dried so that it may be stored indefinitely and extra finely ground and screened for mixing in mashes. It contains all the food value of the meat and supplies the necessary protein and bone phosphate for egg-making. Analysis: Protein (min.) 50 per cent; Fat (min.) 8 per cent; Fibre (max.) 3 per cent.

Struven's Fish Meal

Fish Meal is an excellent source of proteins and minerals for all types of farm feeds. It may be used in combination with the meat by-products and milk, or as the sole source of animal protein in any ration. Protein is guaranteed 55 per cent. Fibre is less than 1 per cent.

For sturdy, thrifty stock, we recommend using Struven's Fish Meal in every ration.

Pearl Grit

A clean, white limestone Grit which is of proper hardness to serve as a grinder and at the same time, because of its high calcium carbonate content, supplies the necessary minerals for growing chicks and laying hens. Furnished in two sizes—coarse for poultry and fine ground for chicks.

Mica Crystal Grit

Mica Crystal Grit contains the proper combination of Mica, Quartz, Aluminum and Iron essential to all kinds of poultry. The peculiar formation of this grit, containing a large per cent of small flakes of Mica, assures at all times a sharp grinding surface. Furnished in three sizes, "Poultry," "Pigeon," and "Chick," all at the same price.

Broschkowsky's Health Grit

For pigeons. Every ingredient entering into its composition is the best obtainable, clean and is prepared amid sanitary surroundings. It contains nothing injurious of any nature; keeps your birds' digestive organs in prime order; provides the proper shell material; assists the birds in the moult; raises more and stronger youngsters; and wards off many troublesome diseases.

Red Cross Health Grit

A formulated mixture containing a great variety of gritty particles and materials with tonic properties, including everything the bird needs in proper proportions. Contains in condensed form the best tissue-building ingredients for birds known to science. A reconstructive tonic mixture of only pure properties.

Poultry Charcoal

Keeps poultry strong, healthy, and in good laying condition. Aids digestion, corrects wrong feeding and prevents disease. Fowls young and old should have free access to it at all times. We carry two sizes in stock—Medium and Fine.

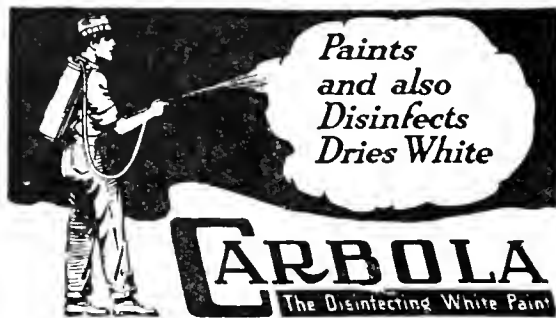
Cut Red Clover

Cut Red Clover is one of the best green feeds for winter egg-production. The grade we offer is the purest and best to be had. Makes an excellent litter for chicks.

Miscellaneous Seeds and Grains

Cracked Corn	Whole Flaxseed
Whole Corn	Flaxseed Meal
Pigeon Corn	Barley
Pinhead Oatmeal	Wheat
Hulled Oats	Buckwheat
Sunflower Seed	Millet
Hemp Seed	Alfalfa Leaf Meal
Canary Seed	Oil-Meal
Rape Seed	Gluten Meal
Kaffir Corn	Cotton Seed Meal
Pigeon Peas	

Our stocks of the above are carefully selected and will be found equal to any on the market.



A white paint and powerful disinfectant combined in powder form. Stir the powder in a pail of water and it is ready for brush or sprayer. *Does not clog sprayer. Won't peel or flake.*

It gives walls and ceilings a smooth, white finish, increases the light, improves the appearance, and helps make buildings clean, sweet-smelling and free from mites and contagious disease germs. For dairies, poultry houses, cellars, dog-kennels, rabbit-hutches, garages, tree-trunks, etc. One pound covers about 100 square feet.

5 lbs. 60 cts., 10 lbs. \$1, 25 lbs. \$1.90, 50 lbs. \$3.50.



Saves Time, Work, and Money!

If you want an easy way to save yourself disagreeable work and at the same time give your birds a clean, sanitary home, be sure to use O. K. Poultry Litter. Leading poultrymen everywhere prefer O. K. because of its many outstanding superiorities.

O. K. is clean, sanitary and easy to use. It keeps houses warm, dry, and free from dampness; it eliminates the need for monthly litter change. You'll like its uniform quality, its unusually high absorbency, its longer life.

Bales weigh about 175 pounds and cover about 80 square feet, 3 inches deep. Price, \$3.25 per bale; 5-bale lots, \$3.15 per bale. Delivery prepaid in Pittsburgh and suburban districts.

Animal-Poultry Yeast Foam

Vigor Personified



Yeast Foam stimulates the reproductive organs and makes more eggs; it maintains health and vigor and improves nutrition; produces bigger and stronger chicks. Helps increase milk-production in dairy cattle. Yeast Foam will do for all kinds of animals and birds what it does for poultry, cattle, and hogs. Mix it in the feed for dogs, rabbits, turkeys, pigeons, ducks, and foxes. 4-lb. box \$1.

try, cattle, and hogs. Mix it in the feed for dogs, rabbits, turkeys, pigeons, ducks, and foxes. 4-lb. box \$1.

Pratt's Vitamin-Tested Cod-Liver Oil

Pratt's Cod-Liver Oil is a pure, clear, light yellow, tested oil, with a vitamin A content guaranteed to conform to the standard of the United States Pharmacopoeia.

Added to the feed of baby chicks, aids growth, promotes health, prevents leg-weakness, and decreases mortality. The use of Cod-Liver Oil for layers results in better health, more and better-shelled eggs, quicker growth, and greater weight in market stock. Add it to the feed of all live stock.

Gal. can \$2.10, 5-gal. drum \$7.75.

30-gal. drum \$31.80, 50-gal. drum \$51, shipped from factory, freight prepaid.

Nopco Cod-Liver Oil

The dependable Vitamin A and D source. It prevents rickets and aids in the production of more firm-shelled eggs of good market quality. It helps reduce mortality, increases hatchability, and increases income per pound of feed. Nopco Cod-Liver Oil is a high-grade, natural cod-liver oil above U. S. P. standards in Vitamin A and D content. Contains less than 1.4 per cent free fatty acid. The popular favorite of thousands of poultrymen all over the United States.

2-lb. can \$1.10, 5-lb. can \$2.50. Price on larger quantities quoted on request.

Morti-Cocci

Used and recommended by many leading poultrymen for the control of coccidiosis. It should always be kept on hand for immediate use at the first symptoms of the disease. Add it to the drinking-water. A gallon will eradicate the disease from 500 chicks. Complete directions on package.

Qt. \$1.25, 1/2gal. \$2, gal. \$3.

Toxite Disease Control Spray

Invaluable for the control and prevention of disease and parasites. This powerful germicide kills all disease germs, including coccidiosis and tapeworm eggs. Equally effective for killing lice, red mites, fleas, ticks, bedbugs, ants, roaches, and other pests. Easy to use. Safe. Inexpensive. Approved by leading authorities and experimental stations.

Qt. 50 cts., gal. \$1.50, 5-gal. drum \$6.50.

Iodine Suspensoid Merck

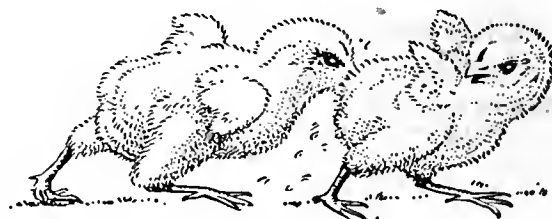
The practical, economical way to destroy coccidial oöcytes, the eggs of the parasite that causes coccidiosis, one of the most serious and wide-spread diseases of poultry. Usually appearing in chicks about three weeks of age, this disease causes a very high death-rate from then on until the age of three months.

A concentrated product to be diluted with water.

1/2-lb. bottle \$2, 1-lb. bottle \$3.65.

K-R-O Kills Rats

Cannot kill live stock or poultry. 6-oz. size 35 cts.; 22-oz. size \$1.



Fox's Cannibalism and Pick-Out Control

A specially prepared red stain that is painted on the windows. It is transparent, moisture-proof, and can be applied on inside or outside of the windows and can be used on glass, Cel-O-Glass, or glass substitutes. Gives off a red glow under which chicks cannot distinguish blood. Stops instantly cannibalism in chicks and pick-outs in laying pullets. One pint covers 60 to 80 square feet of glass.

1/2-pt. can 90 cts., 1-pt. can \$1.50, 1-gal. can \$8.50.

Pik-Rem

Stops Cannibalism

Pik-Rem is not a medicine but a help in breaking the vicious habit of chicks picking each other and will quickly break up the condition known as cannibalism. It is blood-colored and blood-soluble, making it adhere to raw bloody surfaces. Very effective and harmless.

5-oz. jar 50 cts., 12-oz. jar \$1, 26-oz. jar \$2, postpaid.

Toxite Veterinary Ointment

Invaluable for treating cuts and sores of all animals. It is both healing and antiseptic. Controls cannibalism and tail-picking in poultry. 4-oz. jar 50 cts., postpaid.

BOOKS

Poultry

American Standard of Perfection. Published by the American Poultry Association and is the American authority on the recognized characters of all breeds of chickens, turkeys, ducks, and geese. Contains nearly 500 pages, 218 illustrations. Cloth binding, \$2.50.

Egg Record and Account Book. A simple, easy method of keeping correct accounts by the day, month, and year, of all expenses and income. Also a record of all eggs laid, set, or sold; of chicks hatched and sold, and a record of orders as filled. 40 cts.

Best Plans of Poultry-Houses. Following the plans in this book is assurance that you will have a satisfactory poultry-house at the least expense. Illustrated. 50 cts.

Best Methods of Feeding. This book gives, in balled-down, plain descriptions, the methods of feeding which have produced the best results. 50 cts.

Best Methods of Culling. Tells how to select good layers from the poor layers. Illustrated. 50 cts.

Pigeons, Squabs, and Turkeys

A to Z of Pigeons. By E. J. W. Dietz. New edition. The last word on pigeons. 156 pages; 51 illustrations. \$1.

National Standard Squab Book. By E. C. Rice. All about breeding pigeons and growing squabs for market. 416 pages; 226 illustrations. \$1.

Turkey Production. By L. E. Cline, B.S., M.S. A complete text on breeding, feeding, handling, marketing, and disease control, prepared for the use of turkey producers and agricultural students. 450 pages; illustrated. Cloth, \$3.50.



Have a **Conkey** Corner in Your Poultry- House Ready for Emergency



Raising poultry is pleasant and profitable when "good luck" is with you. "Good luck," however, is not merely a matter of chance, but of being prepared. For more than twenty-five years Conkey has been The Poultry Doctor. Install a Conkey Corner of remedies in your poultry-house

as insurance against disease, trouble, loss, and disappointment. Conkeys Poultry Book free if you call at our store, or mailed for 4 cents in stamps.

CONKEYS POULTRY TONIC. Unequaled as a laying tonic, molting-powder, chick-conditioner, and poultry-regulator. Not a stimulant—no red pepper. Aids appetite, digestion, and helps your birds get more out of their feed.

1½ lbs. 25 cts., 3¼ lbs. 50 cts., 7 lbs. \$1, 12 lbs. \$1.70, 25 lbs. \$3.10.

CONKEYS OLD RELIABLE POWDER. This famous treatment has been on the market for thirty years, known to poultrymen everywhere as Conkeys Roup Remedy. Put it in drinking founts on cold, rainy days, or when there is a sudden change in weather. In mild doses it acts as a tonic.

25 cts., 50 cts., \$1, and \$2.35; 5 lbs. \$5.50, postpaid.

CONKEYS DIA-TABS. The majority of diarrhea cases in chicks are due to digestive disorders which arise from feeding, chilling, overheating, crowding, insanitation, etc. The use of Conkeys Dia-Tabs in the drinking-water will help prevent trouble.

Pkgs. 25 cts., 50 cts., and \$1, all postpaid; breeder size (950 tablets) \$3.75, postpaid.

CONKEYS NOX-I-CIDE. Conkeys Nox-i-cide has a large variety of uses. Use it for spraying during the "weekly clean-up" as a preventive of disease and a help in keeping down mites, ticks, blue bugs, etc. Conkeys Nox-i-cide is very effective for washing incubators, brooders, fountains, etc.

Pt. 40 cts., qt. 60 cts., 2 qts. 90 cts., gal. \$1.50, 5 gals. \$6.75, 10 gals. \$12.75.

Conkeys Poultry Pills. Formerly called Conkeys Roup Pills. 25 cts., 50 cts., and \$1, postpaid.

Conkeys Balmo. A soothing, cooling application for relieving irritation around the swollen eyes and head and in the mouth when treating conditions caused by colds and similar troubles. Pkg. 50 cts.

Conkeys Nikala Tablets. Effective in controlling large round worms in chickens and turkeys. Individual treatment of each bird is a simple matter, and it is the safest, surest way of destroying these profit-taking parasites.

Chick Size: 40 tablets 50 cts., 90 tablets 90 cts., 500 tablets \$3.25, 1,000 tablets \$6, postpaid.

Adult Size: 50 tablets 75 cts., 100 tablets \$1.25, 500 tablets \$5.25, 1,000 tablets \$9.50, postpaid.

Conkeys Y-O. A vitamin food containing cod-liver oil and brewers' yeast. It holds the potency of A, B, D, E, and G Vitamins so necessary for complete digestion. It comes in powder form and mixes readily with any poultry mash. Only 2 to 3 per cent of this potent vitamin food is required in any mash.

Lb. 50 cts., 2 lbs. 90 cts., 5 lbs. \$1.60, drums (25 lbs.) \$5.45, 50 lbs. \$9.75, 100 lbs. \$17.50.

Conkeys Poultry Worm Powder. For large, round worms, gizzard and caecal worms and flukes or leaf worms in poultry.

Pkgs. 25 cts. and 50 cts., postpaid. Breeder size (5 lbs.) \$2.75, postpaid.

Conkeys Scaly Leg Remedy. Destroys parasites causing this troublesome affection.

25 cts., postpaid.

Conkeys Lice Powder. Destroys body lice. They suck the energy from your flock. Dust it on your hens and in the dust-bath.

12 ozs. 25 cts., 40 ozs. 50 cts., and 12-lb. pail \$2.10, postpaid.

Burrell-Dugger Poultry Remedies

Burrell-Dugger Poultry Remedies have been used by thousands of poultry owners, from coast to coast, for many years, and they have more than made good. They are specialized remedies for poultry, produced in an up-to-date modern laboratory, just as scientifically and carefully as medicines for human beings.

Every one is guaranteed to satisfy you, or your money will be promptly refunded in full.



DON SUNG

Tonic and Conditioner for Laying Hens

Don Sung is a concentrated medicine—no bulk or filler—ready to add to the mash-feed. It has a direct tonic action and doesn't force or hurt the hen in any way. It does its wonderful work by putting the hen in good health, and helping maintain that health.

Prices of Don Sung Tablets: Small size, 50 cts.; large size (3 times 50-ct. size) \$1; special size (6 times \$1 size) \$5, postpaid.



FOR CHICK DIARRHEA

Don't sit back, and say your loss of baby chicks can't be stopped. It can be stopped—easily, quickly, and at almost no expense by using Avicol in the drinking water. Avicol is a special bowel astringent, and helps the chick withstand infection.

It is easy to give. The chickens doctor themselves.

After you have once tried Avicol, you would no more think of trying to raise baby chicks without it than you would think of denying them food. It should be in the very first water the little chicks drink.

Price, 50 cts.; large size (holds three times 50-ct. size) \$1; economy size (6 times \$1 size) \$5, postpaid.



Group-Over

Positive Guaranteed Treatment for Colds in Poultry

Keep a bottle of Group-Over on hand, and at the first symptom of a cold in your flock, start giving it to every affected bird. It clears the air-passages and brings relief with magic quickness. Group-Over is easily given. It comes in a liquid form and a few drops do the work.

Prices, 50 cts.; \$1 (three times 50-ct. size); \$3 (more than 5 times \$1 size), postpaid.

T. S. F. (Talcimized Sodium Fluoride) KILLS CHICKEN LICE

The U. S. Department of Agriculture and most leading State Agricultural Colleges endorse and recommend the Sodium Fluoride method of killing poultry lice.

For positive results be sure to get the genuine Talcimized Sodium Fluoride (T. S. F.). It is specially processed and prepared especially for poultry use, and is in a convenient, shaker-top package, bearing the U. S. Government's instructions for applying. One small package will treat about 40 chickens.

Price, small size 35 cts.; large size (twice as much) 60 cts.; special size (five times 60-ct. size) \$2.50, postpaid.

Pratts Poultry Remedies

Pratts Poultry Regulator. It builds up vitality, betters digestion, supplies rich food minerals and rare vegetable tonics, and sharpens the appetite. Helps Hens lay! Pkgs. 25 cts. and 55 cts., 12½-lb. pkg. \$1.60, 25-lb. pail \$2.85, 100-lb. drum \$9.50.

Pratts Disinfectant. A powerful coal-tar solution five times stronger than carbolic acid as a germ-killer. It makes a very effective live-stock dip and is excellent for use around poultry houses and stables. Pt. 35 cts., qt. 50 cts., 2 qts. 85 cts., gal. \$1.45, 5-gal. can \$6.50.

Pratts R-P Tablets. Especially valuable for roup. Can be used in the drinking-water or by individual treatments. Pkgs. 25 cts. and 50 cts., postpaid.

Pratts Chick Tablets. Widely used for white diarrhea. In tablet form for use in the drinking-water. Pkgs. 30 cts. and 60 cts., postpaid.

Pratts N-K Capsules. Nicotine is the best round- and pinworm killer. Kamala is the best for tapeworm. Instead of giving your birds two individual treatments, simply give one "Split-Action" N-K. Each N-K Capsule contains both drugs but releases each drug separately and hours apart.

Adult Size: 50 capsules 85 cts., 100 capsules \$1.50, 500 capsules \$5.50, 1,000 capsules \$10, postpaid.

Chick Size: 50 capsules 55 cts., 100 capsules \$1, 500 capsules \$3.75, 1,000 capsules \$6.50, postpaid.

Pratts Roost Paint. Controlled release of Nicotine at steady lice-killing rate makes Pratts Roost Paint deadly to lice at all temperatures. Just paint it on the roost. ½pt. 85 cts., pt. \$1.50, qt. \$2.25, gal. \$7.

Pratts Poultry-Worm Powder. A flock treatment for large, round-, and pinworms. Can be used as a several-day treatment or as a single-dose flock treatment. 75-ct. pkg. (100 hens), \$2.50 pkg. (500 hens), \$4.50 pkg. (1,000 hens).

Pratts Powdered Lice Killer. Kills lice on poultry. Pkgs. 30 cts. and 60 cts.

Lippincott's Poultry Remedy

For the control of roup, Lippincott's has never failed to give quick results when used in the proper way and the birds properly housed. 25 cts., 50 cts., and \$1 per bottle, postpaid.

Walko Tablets

For the drinking-water for baby chicks, turkeys, ducks, geese, or older fowls.

Especially valuable for diarrhea and loose-bowel trouble among incubator chicks. Powerfully destructive to germ-life, yet perfectly safe to give little chicks in their drinking-water as soon as they are out of the shell. 50 cts. and \$1, postpaid.

Rutland Water Glass

Prepared especially to keep eggs fresh over a period of time. One quart will preserve from 15 to 20 dozen of eggs.

Pt. 15 cts., qt. 25 cts., gal. 85 cts.

Dr. Salsbury's Poultry Prescriptions

As a member of Dr. Salsbury's Nation-Wide Poultry Health Service, we have, at all times, the latest bulletins, booklets, and literature of the scientific poultry world. Ask or write us for free educational literature.

Avi-Tone. For chickens and turkeys. Avi-Tone is a flock treatment for the removal of round worms, and also acts as a flock tonic and conditioner. In powder form. Avi-Tone mixes easily in wet or dry mash. 10-oz. pkg. 25 cts., 3-lb. pkg. \$1.10, 6-lb. pkg. \$2, 15-lb. pkg. \$4.75, 25-lb. drum \$7.50, 50-lb. drum \$14, 100-lb. drum \$27.

Cam-Pho-Sal. Pure medicine to be diluted with water to make an antiseptic spray for pneumonia, bronchitis, roup, colds, and all respiratory diseases. 2-oz. bottle 45 cts., 4-oz. bottle 75 cts., 8-oz. bottle \$1.10, 16-oz. bottle \$1.85, ½gal. \$6.75, gal. \$13.

Phen-O-Sal. For fowls of all ages. Widely used for diarrhea in baby chicks, coccidiosis, irritation from worms, and all other forms of bowel disturbances. Medicated tablet form to be put in drinking-water. 25 tablets 25 cts., 50 tablets 50 cts., 125 tablets \$1, 300 tablets \$2, 500 tablets \$3, 1,000 tablets \$5.50.

Rakos. Triple acid, antiseptic, and astringent treatment against acute and chronic coccidiosis in chickens, turkeys, and game fowls. In liquid form, it is mixed with feed or mash. Pt. \$1.25, qt. \$2, ½gal. \$3.50, gal. \$6.

Mixed Bacterin (Fowl). A preventive and curative treatment against bacterial forms of roup, colds, bronchitis, and pneumonia in chickens, turkeys, pigeons, and game-birds. Average dose 1 c.c. injected with syringe. 60 c.c. 85 cts., 250 c.c. \$3, 500 c.c. \$5.75, 1,000 c.c. \$10.

Avi-Tab Krumbles. Especially useful in checking microscopic tapeworms and in treating mycosis of the digestive tract. Can be used in wet or dry mash. 5-oz. pkg. 90 cts., 10-oz. pkg. \$1.65, 1.2-lb. pkg. \$2.80, 3-lb. pkg. \$6.50.

Williams Acid and Ipecac Compound for Turkeys

A proved practical preparation for treatment and prevention of blackhead in turkeys of all ages. Used in drinking-water or in severe cases may be administered with a syringe into the crop. Pt. \$1.75, qt. \$2.75, gal. \$10.



Lee's Gizzard Capsules

For round worms, tapeworms, pinworms in chickens, turkeys, etc. **Chick Size:** 50-capsule pkg. 40 cts., 100-capsule pkg. 75 cts. **Pullet Size:** 50-capsule pkg. 50 cts., 100-capsule pkg. \$1. **Adult Size:** 50-capsule pkg. 75 cts., 100-capsule pkg. \$1.25.

Dr. LeGear's Poultry Prescriptions

Dr. LeGear's Poultry Prescription—Mineralized. This wonderful tonic contains mineral and vegetable ingredients, scientifically compounded to produce an efficient tonic, appetizer, conditioner, and regulator. 1¼-lb. pkg. 25 cts., 3-lb. pkg. 50 cts., 7-lb. pkg. \$1, 25-lb. pkg. \$3.

Dr. LeGear's Poultry Worm Powder. Flock treatment for large round worms in growing chicks, laying hens, and turkeys. 1½-lb. pkg. 50 cts., 4-lb. pkg. \$1.

Dr. LeGear's Dip and Disinfectant. Antiseptic disinfectant, germicide, and deodorant. Use regularly to keep poultry houses, incubators, brooders, etc., sanitary and free from lice and mites. 8 ozs. 30 cts., qt. 60 cts., gal. \$1.50.

Dr. LeGear's Nicotine-Kamala Pills. **Adult Size:** For individual treatment. One pill does the work—no fasting. 50 tablets 75 cts., 100 tablets \$1.25, 500 tablets \$5.50. **Chick Size:** 45 pills 50 cts., 110 pills \$1, 500 pills \$3.50, postpaid.

Dr. LeGear's Chick Tablets. An intestinal astringent. When dissolved in the drinking-water it has a mild, antiseptic effect on the water which is very beneficial to all baby chicks as an intestinal astringent. 80 tablets 50 cts., postpaid.

Dr. LeGear's Lice Powder. Quick and effective in getting rid of lice and mites on poultry or in nests. Kills them as if by magic. 14-oz. can 25 cts., postpaid.

Dr. Hess Products

Dr. Hess Poultry Pan-A-Min. Its tonics promote appetite; keep hens healthy; start pullets and moulted hens to lay. Formerly known as Dr. Hess Panacea. 1½-lb. pkg. 25 cts., 3-lb. pkg. 45 cts., 7-lb. pkg. 95 cts., 15-lb. pkg. \$1.90, 25-lb. pkg. \$2.85, 100-lb. drum \$9.40.

Dr. Hess Poultry Worm Powder. A proved single-dose flock treatment for round worms. Given in mash, the expulsion of worms starts in a few hours and is usually completed in from 24 to 36 hours. No fasting or laxatives required. Does not check egg-production. Four ounces treat 100 birds. 2-oz. pkg. 50 cts., 4-oz. pkg. 90 cts., 10-oz. pkg. \$1.90, 1¼-lb. pkg. \$3, 2½-lb. pkg. \$5.40.

Dr. Hess Poultry Worm Tablets. The active ingredients of Dr. Hess Poultry Worm Powder in tablet form for individual treatment. 40-tablet pkg. 50 cts., 100-tablet pkg. \$1, 250-tablet pkg. \$2, 500-tablet pkg. \$3.50.

Dr. Hess Poultry Tablets. Valuable in treatment of roup; slightly astringent, non-irritating, and healing. Used as a local antiseptic and to medicate drinking-water. Aids in preventing disease. 25 cts., 50 cts., and \$1, postpaid.

Dr. Hess Powdered Louse-Killer. Effective in ridding poultry of lice and mites. 1-lb. pkg. 30 cts., 2½-lb. pkg. 65 cts.

B-K (Bacili-Kil)

For prevention or treatment of roup, canker, chicken-pox, white diarrhea, bronchitis, and colds. Used in drinking-water, prevents spread of disease. Cleanses infected spots—kills the germs and cannot harm baby chicks.

Ideal disinfectant for brooders and incubators. Kills odors and leaves no smell of itself. B-K is concentrated—a little goes a long way.

Powder		Postpaid
Small (makes 1 gal.).....	\$0 75	\$0 85
Large (makes 3 gals.).....	1 50	1 60
Liquid		
4-oz. bottle.....	30	40
10-oz. bottle.....	50	60
1-qt. bottle.....	90	1 05
	Not Postpaid	
1-gal. bottle.....	\$2 00	
5-gal. jug.....	8 50	

HTH-15

Don't let colds and other respiratory troubles sap the strength of your breeding flocks. Dust with HTH-15 to prevent and combat these ailments. Use it regularly in the drinking-water to prevent spread of infection. Invaluable disinfectant for brooders and incubators. 1-lb. can 50 cts., 3-lb. can \$1, case of six 3-lb. cans \$5.

Sterilac

A virtually non-poisonous deodorizer and disinfectant.

Used in drinking-water, Sterilac will aid in the prevention of sour crop and bowel troubles. It is recommended for use in hatcheries, incubators, and for sanitation in general. Being in powder form, Sterilac does not freeze and fresh solutions can be prepared as needed. Cleanliness and sanitation are essential for a successful poultry business. 2-oz. bottle \$1, 8-oz. bottle \$2.50, 16-oz. bottle \$4.50, 5-lb. pkg. \$18.



Chic-Tone in the drinking-water increases the appetite and builds up vitality. It is both an intestinal antiseptic and general tonic. Protects against many intestinal disorders—helps to keep your birds healthy, aiding them to get maximum value from the feed consumed. Poultry raisers everywhere are finding Chic-Tone in the drinking-water is a safeguard and insurance against low vitality. Pt. 60 cts., qt. \$1, gal. \$3.50, 5 gals. \$13.75.

Chick-Tone Inhalant

When poultry raisers pour Chic-Tone in the drinking-water and spray Chick-Tone Inhalant in the air, their death-losses from colds and respiratory ills are kept way down, and that applies to birds of all ages from baby chicks to old hens. Powerful, germ-killing gases and healing oils in Chic-Tone Inhalant are inhaled by birds, opening up the nostrils, causing discharge of mucus, healing irritated membranes. Do not dilute. Spray right into faces of birds. Qt. \$1, gal. \$3.50, 5 gals. \$13.75.

Barnes Emulsion



A scientifically tested vitamin-containing product which can be fed with safety to domestic animals and poultry. If your chickens are backward in growth and development, have pale faces and shanks, and stand around droopy, with eyes closed; if some of your birds "go light," then die; or if they are affected with brownish diarrhea, the cause is likely to be intestinal worm-infestation.

Obtain a can and prove to yourself its merit and effectiveness. Qt. \$1, gal. \$3, 5-gal. keg \$12.50.

Ask for 32-page booklet "Common Sense vs. Worms."

"Black Leaf" Worm Powder CONTROLS POULTRY ROUND WORM

An odorless, tasteless, dry compound containing nicotine that remains insoluble until it reaches the intestines where large round-worm infestation occurs. This product furnishes "one-shot" control of round worm without handling the birds and without the disturbance caused by individual handling.

"Black Leaf" Worm Powder is easily fed in mash. The dose for 100 birds is 4 ounces, mixed in a gallon of mash, fed the first thing in the morning. 4-oz. pkg. 75 cts., 1½-lb. pkg. \$3, 3-lb. pkg. \$5.60, ppd.

"Black Leaf" Worm Pellets. Produced from "Black Leaf" Worm Powder. Highly efficient. 85 cts. per 100, \$3.25 per 500, \$6 per 1,000, postpaid.

Gold-Leaf Tobacco Powder

Manufactured especially to control round worms in poultry. So certain is its action that it may well be considered a specific for the control of this trouble. The treatment is exceedingly inexpensive.

Mix two pounds of Gold-Leaf Tobacco Powder with 100 pounds of dry mash. 2-lb. carton 25 cts., 10-lb. package 75 cts., carton (6 10-lb. packages) \$4.

Iodine Vermicide Merck

Kills worms in poultry the approved way. One gallon of diluted material is sufficient to treat about 125 adult birds. Iodine Vermicide will not throw birds off egg-production, but will, if properly used, increase it materially. ½-lb. bottle \$1.90, 1-lb. bottle \$3.40.

Dosing Appliance, chick and poultry size 35 cts.; adult turkey size \$1.

McKeon's "Liquid Sulpho" THE HEALTH INSURANCE FOR POULTRY AND RABBITS

Used daily in drinking-water eliminates and prevents large round worms and other intestinal diseases. Rids and keeps birds free of lice. 3-oz. bottle 50 cts., 8-oz. (medicates over 1,200 gals. of water) \$1, postpaid. Unconditionally guaranteed.

Carbolineum

Standard Insecticide and Wood Preserver
Since 1876

One thorough application of Avenarius Carbolineum, either by brush or sprayer, to the walls, dropping-boards, roosts, etc., of buildings, will kill all mites by direct contact and effectually stop their propagation. Only necessary to apply once a year.

Avenarius Carbolineum is composed of non-volatile anthracene oils and other ingredients, and represents the very cream of wood-preserving oils. It will not evaporate or leach from wood in a short time, but will remain there almost indefinitely.

Termites (white ants) will not attack "Avenarius Carbolineum" treated wood. Even after they have been found, future infestations may be prevented if "Avenarius Carbolineum" is applied.

1-gal. can \$1.60, 5-gal. can \$7, 10-gal. drum \$13.50.

35-gal. steel barrel \$39.20, 55-gal. steel barrel \$57.75, shipped from factory, freight prepaid.



Zenoleum

An efficient insecticide, disinfectant, deodorizer, germicide, and cleanser. It is essentially a solution of coal-tar creosote oil soap and gives a most perfect emulsion when mixed with water. Use it as a spray in poultry houses and kennels, dip for sheep and lice on horses and cattle. Makes an excellent wash for dogs. One quart makes about 25 gallons of solution. 8-oz. can 35 cts., 1-qt. can 75 cts., ½-gal. can \$1.25, 1-gal. can \$2, 5-gal. can \$8.

"Black-Leaf 40"

Paint it on the roosts

A sure method for controlling body-lice. Is also effective when applied as a spray against poultry mites. One ounce will paint about 12 or 15 running feet of roost. When used as a spray, dilute at the rate of about one tablespoonful to one gallon of water and add about ½ ounce of ordinary laundry soap. Dissolve the soap in hot water. 1-oz. bottle 35 cts., 5-oz. bottle \$1, 1-lb. bottle \$2.25, 2-lb. tin \$3.25.

Roto Pigeon Salt

A necessity to the health of pigeons. In brick form. Size of Bricks, 7½ x 3½ x 2 inches. Each, 25 cts., postpaid 35 cts.; doz. \$2.75, postpaid \$2.90.

Ex-Cel-So Rabbit Salt Spool

Keep your stock healthy and in good condition by keeping Salt Spools always before them. Prevents common disorders and disease. Two kinds: pure salt and salt with sulphur added. Either kind, 5 cts. each, 50 cts. per doz., postpaid 70 cts. per doz.; 100 for \$3.50.

Dog and Pet Foods and Supplies

This department offers a wide assortment of foods, remedies, and supplies for dogs, cats, birds, and other pets. They have all been tested and found reliable for the purposes intended.

In addition to the goods shown in this Catalogue, we have a

representative line of Collars, Harness, Leashes, Baskets, Brushes, Blankets, and Sweaters for dogs. Since this merchandise is too diversified to be included in the Catalogue, we invite you to call at the store and inspect it personally.

BANNOCK DOG FOODS

For ALL DOGS . . ALL BREEDS . . ALL AGES

BANNOCK BODY BUILDER

"Dog Food at Its Best"

Healthful, economical, and convenient to feed, Bannock Body Builder is a balanced ration, containing all of the food elements necessary for the proper nutrition of dogs. Proteins, vegetables, fats, minerals, vitamins, and Fleischmann's Irradiated Yeast—all especially selected and in correct proportion. Breeders, trainers, and veterinarians alike recommend Bannock Dog Foods.

BANNOCK DOG BISCUIT

"Good Food for Good Dogs"

Available in both whole and kibbled forms, Bannock Dog Biscuits may be fed dry or soaked. Kennel-owners and breeders use Bannock Dog Biscuits because they are higher in digestible proteins, contain the necessary vitamins, and are expertly blended with carefully selected carbohydrates.

Bannock Body Builder

5 lbs.....	\$0 45
10 lbs.....	85
25-lb. bag.....	1 90
50-lb. bag.....	3 50
100-lb. bag.....	6 50
500 lbs.....	28 75

Bannock Dog Biscuit Whole or Kibbled

5 lbs.....	\$0 60
10 lbs.....	1 10
25 lbs.....	2 40
50-lb. bag.....	4 40
100 lbs.....	8 25
500 lbs.....	38 75

Spratt's Dog and Puppy Foods

For over eighty years, Spratt's "Meat Fibrine" Biscuit Foods have been termed "Foods of Quality." They lead in nourishing properties, suitability to the constitution of present-day dogs, and in economical value. Their reputation is world-wide.

SPRATT'S FIBO. An appetizing granulated food for shy and dainty feeders. Suitable for change of diet for any dog at any time. Feed dry or soaked with broth. Carton 40 cts., 5-lb. bag 90 cts., 25-lb. bag \$3.45, 100-lb. bag \$12.50.

SPRATT'S OVALS. Handy pocket biscuits suitable for all breeds. Carry a few when on a ramble with your dog. Carton 35 cts., 5-lb. bag 75 cts., 25-lb. bag \$3.10, 100-lb. bag \$11.25.

SPRATT'S SPIX. Meat fibrine biscuit, bone size. All dogs like this biscuit. Carton 35 cts., 5-lb. bag 75 cts., 25-lb. box \$3.20, 50-lb. box \$5.90.

SPRATT'S CHARCOAL OVALS. Aid in the elimination of fetid breath and stomach impurities. Carton 40 cts., 5-lb. bag 75 cts., 25-lb. bag \$3.15, 100-lb. bag \$11.75.

SPRATT'S COD-LIVER OIL OVALS. Aids in the conditioning of dogs; invaluable during the winter months. Carton 40 cts., 5-lb. bag 75 cts., 25-lb. bag \$3.15, 100-lb. bag \$11.75.

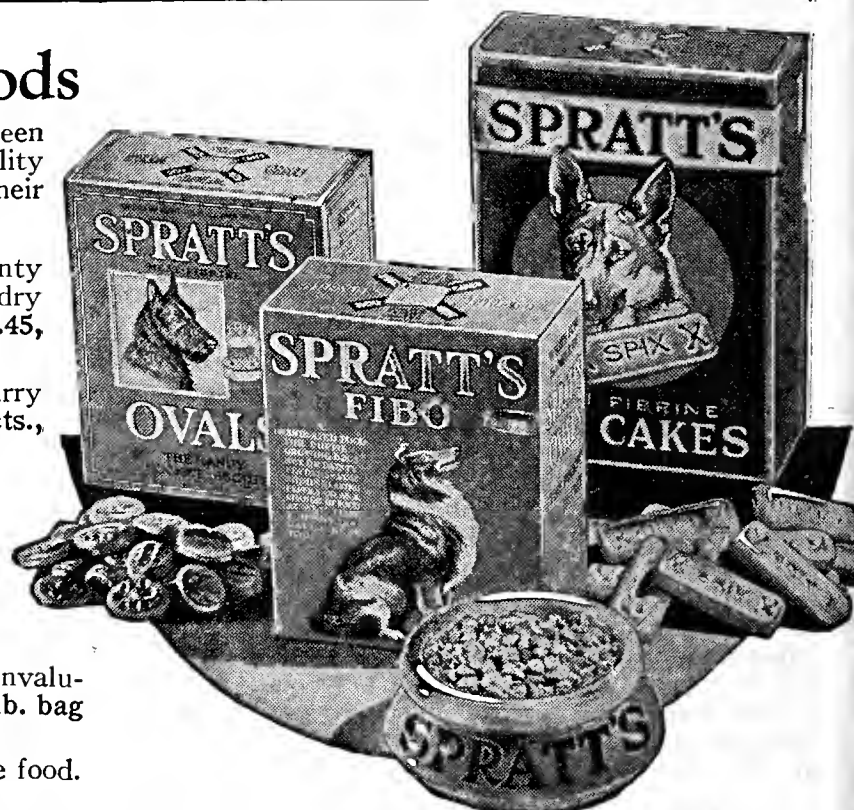
SPRATT'S CHALLENGE TERRIER MEAL. Granulated meat fibrine food. 5-lb. bag 65 cts., 25-lb. bag \$2.85, 50-lb. bag \$5, 100-lb. bag \$9.50.

SPRATT'S MEAT FIBRINE DOG CAKES. Standard dog cake for large dogs, used by all leading dog breeders. Carton 35 cts., 5-lb. bag 75 cts., 25-lb. box \$3.10, 100-lb. box \$11.15.

SPRATT'S PUPPY CAKES. A complete and perfect food for puppies from weaning-time onward, and for small breeds as the regular food. Carton 40 cts., 5-lb. bag 75 cts., 25-lb. bag \$3.10, 100-lb. bag \$11.25.

SPRATT'S COD-LIVER OIL CAKES. For the larger breeds of dogs. Carton 40 cts., 5-lb. bag 75 cts., 25-lb. bag \$3.15, 100-lb. bag \$11.75.

SPRATT'S PEPSINATED MEAL. For puppies or kittens with weak digestion; is extremely assimilative and will make most unpromising youngsters thrive. 12-oz. can 40 cts.



SPRATT'S PUPPILAC. A perfect substitute for the milk of the bitch, for rearing orphan puppies, at weaning-time and for ailing dogs in sickness or convalescence. This is also valuable as a food for cats and kittens. 10-oz. can 50 cts.

SPRATT'S BONE MEAL FOR PUPPIES. A great preventive of early weakness in puppies, containing all the elements needed to insure vigorous frame. Prepared for easy mixing with the staple food. 3-lb. tin 50 cts.

SPRATT'S CALCIUM PHOSPHATE. For Rickets and Osteoporosis. An admirable adjunct in the feeding of puppies of the large breeds. It may also be given to bitches before whelping. Easily assimilated and has no irritating effect on the stomach. 1-lb. can 75 cts.



We Recommend PERFECTION DOG FOODS

"Time-Tested for more than 25 years"



MEAT-CEREAL. (For all dogs, all ages.
Ready to feed.)

2 1/2-lb. package.....	\$0 25
5-lb. bag.....	40
10-lb. bag.....	75
25-lb. bag.....	1 75
50-lb. bag.....	3 25
100-lb. bag.....	6 00
500 lbs.....	27 50

CUBES (Meat-Cereal formula).

5-lb. bag.....	\$0 45
10-lb. bag.....	85
25-lb. bag.....	1 95
50-lb. bag.....	3 40

Protein to give strength—carbohydrates for energy and heat—minerals for digestion and bone-building. All Perfection Dog Foods are scientifically cooked and blended, each one a perfectly balanced ration.



FREE
•
DOG BOOKS
•
PEDIGREE BLANKS



KIBBLED BISCUIT.

5-lb. bag.....	\$0 60
10-lb. bag.....	1 10
25-lb. bag.....	2 45
50-lb. bag.....	4 50
100-lb. bag.....	8 50

WHOLE BISCUIT.

5-lb. bag.....	\$0 60
10-lb. bag.....	1 10
25-lb. bag.....	2 40
50-lb. bag.....	4 40
100-lb. bag.....	8 25

CANNED MEAT FOOD. 1-lb. can 10 cts.,
3 for 25 cts., case (48 1-lb. cans) \$3.90.



Miller's Battle Creek Health Foods for Dogs

These excellent foods for dogs are made from meat, cereals, Fleischmann's Irradiated Dry Yeast, Squibbs Cod-Liver Oil, bone-meal, milk, egg, and other top-quality ingredients. They contain abundant vitamins and all necessary food elements, and can be fed alone or mixed with other things for variety. Satisfaction guaranteed or money refunded.

Miller's basic diets are concentrated and go three times as far as fresh or canned meat foods. They contain no moisture or filler.

KIBBLES

5 lbs.....	\$0 60
25-lb. sack.....	2 45
50-lb. sack.....	4 50
100-lb. sack.....	8 50

RATION

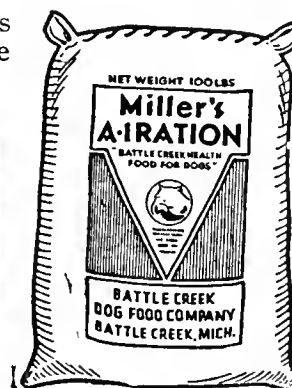
5 lbs.....	\$0 40
25-lb. sack.....	1 75
50-lb. sack.....	3 25
100-lb. sack.....	6 00

PUPPY MEAL

28-oz. carton.....	\$0 30
25-lb. sack.....	2 45
50-lb. sack.....	4 50
100-lb. sack.....	8 50

BISCUIT

2-lb. carton.....	\$0 35
25-lb. sack.....	2 40
50-lb. sack.....	4 40
100-lb. sack.....	8 25



Bresko Dog Foods

with 5 Vitamins, plus Ingredient "K"

Ingredient K has revolutionized modern dog-feeding. It is vacuum-processed Liver Meal, and searching laboratory and kennel tests have revealed its amazing power to build red corpuscles, to prevent anemia, and to make puppies grow into strong, sturdy dogs. Ingredient K is blended with Bresko plus the five health-giving vitamins, A, B, D, E, and G.

BRESKO MEATBONE CRISP. (Kibbled.)

5-lb. bag 50 cts., 25-lb. bag \$2, 100-lb. bag \$7.

BRESKO RATION. 5-lb. bag 40 cts., 25-lb. bag \$1.65, 100-lb. bag \$5.75.

Best-of-All Dog Ration

A balanced food for dogs and puppies, made of the very best ingredients of meat, grain, cereals, bone, cod-liver oil, and powdered molasses. 5-lb. bag 40 cts., 25-lb. bag \$1.65, 50-lb. bag \$2.90, 100-lb. bag \$5.25.

Ti-O-Ga Dog Food Meal

This is the original Leon F. Whitney formula perfected to the highest standard of modern scientific knowledge of canine nutrition. It is an economical food, containing 1,500 calories to the pound, which is twice the energy value of lean beef and provides nutrients lacking in beef. Ti-O-Ga Dog Food is an ideal maintenance diet which will keep dogs of all breeds in splendid health, strong bone, and fine coat. 5-lb. bag 55 cts., 10-lb. bag 90 cts., 25-lb. bag \$2.10, 50-lb. bag \$3.75, 100-lb. bag \$7, 500 lbs. \$32.50.

Ti-O-Ga Puppy Food

Grows puppies faster than any privately prepared diet. Its high protein content, its abundance of calcium, phosphorus, and vital growth-promoting vitamins insures the best possible growth of puppies. 5-lb. bag 65 cts., 10-lb. bag \$1.20, 25-lb. bag \$2.25, 50-lb. bag \$4.25, 100-lb. bag \$8.

Pratt's Dog Food

A complete, balanced food in cubed form. No other food or supplement need be fed to completely nourish the dog. It contains all the known necessary vitamins, the bone- and nerve-forming minerals, and nature's own food regulators and conditioners which make for perfect health and growth. It is made from the sweetest and purest of laboratory controlled ingredients. It is economical, easy to feed, and suited to all dogs. Cannot freeze, spoil or mold. 5-lb. bag 35 cts., 10-lb. bag 75 cts., 25-lb. bag \$1.85, 50-lb. bag \$3.25, 100-lb. bag \$6.50.

Hubbard's Sunshine Dog Food

Feed your dog Hubbard's Sunshine Dog Food. He will like it. A dry food containing all the vitamins and freshness of fresh foods. 5 lbs. 55 cts., 10 lbs. 90 cts., 25-lb. bag \$2.10, 50-lb. bag \$3.75, 100-lb. bag \$7, 500 lbs. \$32.50.



Scott's Special Dog Food

A clean, pure, and wholesome food for dogs and puppies of all breeds. Prepared from lean beef with cereals and vegetables added in proper proportion to provide vitamins, proteins, and carbohydrates needed in the daily ration. It is perfectly cooked, ready to feed without any preparation whatever, and is suitable for all-year-round feeding. U. S. inspected and passed by

Department of Agriculture. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.90.

Pard Dog Food

A ready-to-serve ration made especially for dogs and cats of all breeds and ages. Composed of meats, meat by-products, wheat, barley, dry skim-milk, tomatoes, edible bone, sodium chloride and cod-liver oil. U. S. inspected and passed by Department of Agriculture. A product of Swift & Co. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.90.

Red Heart Dog Food

A meat-food product with cereals and vegetables for dogs and cats. Contains all the elements which are essential to the growth and health of animals. Furnished in three diets: Diet A with beef added, Diet B with fish added, Diet C with cheese added. Vary the menu by alternating the diets. 1-lb. can 10 cts., 3 for 29 cts., case (48 cans) \$4.25.

Doggie Dinner

Keep your dog in perfect condition always with Doggie Dinner, the perfectly balanced beef meat ration. It is composed of beef products, rice, barley, oats, carrots, cod-liver oil, charcoal, and bone-meal, all of which are essential to the growth and health of animals. Has the endorsement of leading veterinarians and animal hospitals. 1-lb. can 10 cts., 3 for 25 cts., case (24 cans) \$1.95.

Evr Redy Dog Food

Contains lean red meat, whole wheat, other cereals, vegetables, etc.—in all, ten different ingredients, each contributing its part to make a wholesome, pure, palatable food abundantly supplied with all the vitamins and elements essential to a dog's welfare. No other food is needed because it is a balanced ration. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.25.

Rival Brand Dog Food

A meat-food product with cooked barley, vegetable flour, wheat products, and rolled oats. Cooked and ready for use. Suitable for year-round feeding and for all breeds of dogs. 1-lb. can 10 cts., 3 for 25 cts., case (48 cans) \$3.90.

Sturdy Special Beef Ration

Prepared entirely of heavy beef stock and marrow bone with kelp and wheat germ added. Recommended to be fed as a mixture with granular meal or baked foods or can be fed exclusively as a complete diet. 1-lb. can 20 cts., doz. \$2.25, case (48 1-lb. cans) \$8.60; 2¼-lb. can 40 cts., doz. \$4.50, case (24 2¼-lb. cans) \$8.60.

CHAPPEL BROS., Inc.

KEN-L-RATION PRODUCTS

The meat or meat by-product ingredients of Ken-L-Ration have been examined and passed under Federal supervision. It has been prepared in an establishment operating under Federal meat inspection. Ken-L-Ration is safe to put in your ice-box.



KEN-L-RATION

The Dog Food Supreme

Ken-L-Ration is made two ways, with horse meat or beef meat, and is as clean, pure and wholesome as the food used on your table. It is composed of fresh, lean meat, the best grade of whole cereal, and cod-liver oil tested for its vitamin potency. Ken-L-Ration is U. S. inspected and passed by the Department of Agriculture. This is your absolute guarantee of quality. Ken-L-Ration is the ideal food for growth, body maintenance and health of dogs of all kinds and ages. 1-lb. can 10 cts., 3 for 25 cts., case (48 1-lb. cans) \$3.90.

Maro-Meat

Maro-Meat is a basic ration of fresh meat, blood, liver, bone and marrow too highly concentrated for feeding alone. Designed for large consumers as a basic meat ration to be mixed with Ken-L-Biskit and Ken-L-Worth. An economical ration can be made by mixing 5 pounds of Ken-L-Biskit after absorbing its equal weight in water, and a 1-pound can of Maro-Meat. 1-lb. can 15 cts., 2 for 25 cts., case (48 1-lb. cans) \$5.15; 2½-lb. can 35 cts., case (18 2½-lb. cans) \$5.

Hemo-Ration

A scientifically prepared food of rich and easily digested blood solids, organic iron, natural calcium phosphate, cod-liver oil, meat, and whole cereals. Excellent for anemics and convalescents. 1-lb. can 15 cts., 2 for 25 cts., case (48 1-lb. cans) \$4.75.

For Economy Feed Chappel's Fresh Meat Biskits

KEN-L-BISKIT

INGREDIENTS

Fresh Meat, Wheat Germ, Yeast,
Egg Yolk, Wheat Flour,
Fresh Whole Milk and Bone

Chappel's Ken-L-Biskit is scientifically prepared from fresh raw meat and carefully selected ingredients. Its nutritional value has been proven in laboratory controlled feeding tests.

Whole biscuit, 25-oz. pkg. 25 cts., 3 for 65 cts.; 25-lb. bag \$2.35, 50-lb. bag \$4.40, 100-lb. bag \$8.50, 200 lbs. \$16.50.
Kibbled form, 25-lb. bag \$2.35, 50-lb. bag \$4.40, 100-lb. bag \$8.50, 200 lbs. \$16.50.



KEN-L-WORTH

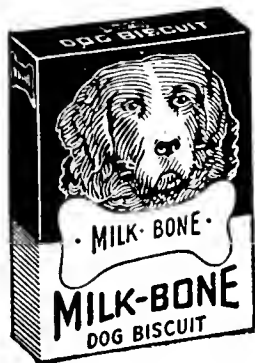
A biscuit of high quality, containing a large percentage of fresh, lean, raw meat and the correct amount of bone. 25-lb. bag \$2.25, 50-lb. bag \$4.10, 100-lb. bag \$7.75, 200 lbs. \$15.

Kit-E-Ration

A cat food made especially for cats, containing fresh cooked liver, lean meat, fresh whole milk, fish, Earlyne, selected cereals, and cod-liver oil. 1-lb. can 15 cts., 2 for 25 cts., case (48 1-lb. cans) \$4.75.

MILK-BONE . . . for Vitamins and Good Health!

Milk-Bone is no experiment or fad. It has been helping dog-owners solve their feeding problems for more than thirty years. In addition to clean beef meat, milk, cereals, and food minerals in proper proportions, Milk-



Bone provides in beneficial quantities the vitamins which are necessary for proper growth. These are Vitamins A, B, D, E, and F—each with its own contribution toward building resistance to disease and maintaining important bodily functions.

Puppy Biscuit, 26-oz. carton. 35 cts. each, 3 for \$1.

Dog Biscuit, 29-oz. carton. 35 cts. each, 3 for \$1.

Junior Size Milk-Bone for Dogs and Puppies, 22-oz. carton. 30 cts. each, 3 for 85 cts.



"Old Trusty" All Terrier Food

A granulated food of even balance, carefully mixed, not medicated or sweetened. An ideal food for all breeds, particularly terriers and active dogs. May be fed dry or moistened with milk or soup. Vegetables may also be added.

5-lb. bag	\$0 65
25-lb. bag	2 50
50-lb. bag	4 50
100-lb. bag	8 50



FLEISCHMANN'S Irradiated Dry YEAST FOR DOGS

Stops itching and helps clear up skin disorders. Gives dogs a beautiful glossy coat. It is ten times as rich in vitamin D as U. S. P. cod liver oil, and builds stronger bones in puppies and prevents rickets. Simply add a teaspoon-

ful of Yeast to the dog's daily diet.

3 1/2-oz. can 25 cts., 8-oz. can 50 cts., 1-lb. can 85 cts., 5-lb. can \$3.50, postpaid.

Dog Books

Feeding the Dog.
Laws about Dogs.
How to Ship Dogs.
Whelping of Puppies.

Dog Shows and Rules.
House Breaking the Dog.
The Dog in the Show Ring.
Handling the Mating of Dogs.

Each of above booklets consists of 16 pages. 25 cts. each, 50 cts. for 3, \$1 for 7; 8 or more, 13 cts. each, postpaid, any assortment

Training the Dog. By Will Judy. For all breeds. Many illustrations. Includes full information on feeding, quarters, grooming, bathing, house-breaking, and care of the dog in health and sickness. The best book of its kind yet published. \$1.50.

Dog Encyclopedia. By Will Judy. The only complete reference work on dogs, giving the photograph, history, description and official standards of all breeds, and giving also full information about all of the other dog subjects, such as breeding, grooming, kenneling, exhibiting, importing, and the like. It answers every question about dogs. Several hundred illustrations. \$5.

Our Dogs. By C. E. Harbison. It tells how a dog should be trained, fed, and kept in condition, also describes the causes and symptoms of diseases as well as their remedies and treatment. Over 350 pages. Cloth, \$2.50.

Principles of Dog Breeding. It is so well and plainly written and so practical and helpful that it will be a guiding book on dog breeding for many years. The greatest book exclusively on this important subject. \$2.

IMPERIAL DOG FOODS

Imperial Dog Foods are made entirely from clean, fresh food-stuffs, processed with the same care and cleanliness as are human foods and supply the essential food-elements that all dogs require. They eliminate the guess-work from feeding and keep your dog healthy and full of pep. All dogs relish Imperial Foods because of their crisp tastiness and enticing flavor, and you will find them both convenient and economical to feed.

Imperial Milk and Meat Cereal. A complete diet in all respects. Contains all of the food factors recognized by experts and carefully processed and proportioned to meet the nutritional requirements of the average dog or pup. Ready to feed simply by adding water, milk, or gravy in equal parts. A quality product and the result of long and actual experience in the dog world. 5-lb. bag 50 cts., 25-lb. bag \$2.10, 50-lb. bag \$3.75, 100-lb. bag \$7.

Imperial Dog-Ration. (Kibbled.) Primarily a high-quality health-promoting, balanced ration Dog Food designed especially for kennel use to form a major part of the dog's diet. 5-lb. bag 65 cts., 25-lb. bag \$2.45, 50-lb. bag \$4.35.

Imperial Kibbled Meat-Ration. A baked food that eliminates your worries about correct diet—a food composed of about 35 per cent cooked meat and fish with cereals, vegetables, grains, and minerals. Absolutely nothing to be added but a little water to mix into a tasty, nourishing mash that your dogs and puppies will relish and thrive on. 25-lb. bag \$2.50, 50-lb. bag \$4.50.

Imperial Dominoes. The ideal Biscuits for small breeds. Small, tasty, and highly nutritious, they are just the right size for the puppies and do not have to be broken or soaked up. 25-lb. bag \$2.65, 50-lb. bag \$4.75.

Gaines Meat and Milk Meal

The Dog Food with Carotene

A complete, balanced dog food for dogs of all ages, and particularly valuable for young puppies from weaning on. It is composed of beef, vegetables, whole wheat, rice, corn, minerals, cod-liver oil, and other ingredients, and is thoroughly cooked and ready to serve. Gives dogs vigorous health, glossy coats, better digestion, and clean intestinal tracts. Fed and highly recommended by leading authorities, breeders, and hunt clubs everywhere.

5 lbs.	\$0 45	50 lbs.	\$3 50
10 lbs.	85	100 lbs.	6 50
25 lbs.	1 90	500 lbs.	28 75

Gaines Krunchon

Made of exactly the same ingredients as Gaines Meat and Milk Meal, but hardened into convenient-sized cubes that all dogs eagerly "crunch on," massaging their gums and increasing the flow of saliva.

5 lbs.	\$0 50	50 lbs.	\$3 75
10 lbs.	90	100 lbs.	7 00
25 lbs.	2 10		

Myles Standish Portable Dog Kennel

Made of genuine Masonite Presdwood. It is weather- and vermin-proof, well ventilated, light, durable, sanitary, and easy to clean. Use it in the house or yard. Ideal for shipping dogs or exhibiting at dog shows and field trials. Walnut finish but you may paint it any desired color.

Dimensions			
Width	Height	Length	Each
12 in.	14 1/2 in.	18 in.	\$5 95
16 in.	19 1/2 in.	24 in.	7 95
21 in.	23 1/2 in.	28 in.	9 95
24 in.	30 in.	36 in.	19 95

Larger sizes available on order





Pulvex

The Guaranteed Flea Powder

One application of Pulvex—the odorless and non-poisonous Flea Powder—will kill every louse, flea, tick, or mite on any animal or bird. It will also prevent reinfestation of fleas for many days. Pulvex is safe to use on dogs, cats, or birds, and is guaranteed to satisfy. 2-oz. pkg. 50 cts.; 12-oz. pkg. \$1.25, postpaid.

Pulvex 6-Use Dog Soap

Make your dog's bath more than just a bath. Pulvex Soap cleans thoroughly, tones, stimulates and oils the skin and coat, kills fleas and lice, and destroys "doggy" odors. Large cake 50 cts.

Pulvex Dry Cleaner

An odorless, harmless powder that cleans your dog or cat without water. Kills fleas and lice, removes doggy odors. Easy to use—no fuss or muss. 4-oz. tin 50 cts.

Pulvex Combination Treatment Worm Capsules

The Pulvex package contains capsules to give your dog a complete treatment for round, hook, and tapeworms. For puppies and dogs weighing less than 10 pounds, pkg. (36 capsules) 75 cts.; for dogs weighing 10 pounds or over, pkg. (24 capsules) 75 cts.

Quadine

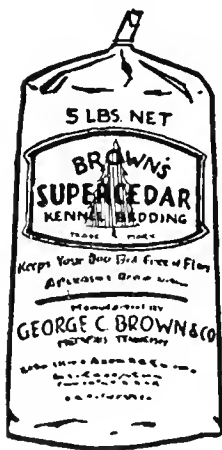
Used by thousands of kennels and fanciers as an aid in treatment and grooming of the dog's skin and coat. Controls dandruff, fleas, flies, mange. 2-oz. bottle 60 cts., 4-oz. \$1, 12-oz. \$2, 1/2 gal. \$6.50, gal. \$10.



Quadine Jr. Atomizer for easy application and bottle of Quadine, set in box, \$1.50.

Liquo-Garlic

A remarkable remedy for worms and intestinal disorders. Odorless. Dogs love it. 2-oz. bottle 50 cts., 4-oz. \$1, 8-oz. \$1.75, 16-oz. \$3.25, 32-oz. \$6, gal. \$20.



Brown's Supercedar Kennel Bedding

Made from genuine *Juniperus virginiana*, the red heart of which contains the fragrant oil of cedar. It is scientifically air-dried to retain its full oil-content. The pungent aroma, so pleasing to you and your dog, actually drives fleas and other vermin away. It not only provides a velvety cushion for a dog, but imparts a gloss to his coat, keeps his hair live, clean, and oily, and keeps the kennel pleasant and wholesome. A pillow filled with it makes an ideal bed for cats and other animal pets. 5-lb. bag 45 cts.; 25-lb. bag \$1.50; 50-lb. bag \$2.65; 100 lbs. \$5.

CAT FOODS AND MEDICINES

Spratt's Tablets for Constipation.....	Postpaid \$0 60
Spratt's Purgative Tablets.....	60
Spratt's Special Tablets. A diuretic and stimulant.....	1 00
Spratt's Tonic and Condition Tablets.....	60
Spratt's Capsules for Ascarids and Large, Round Worms in Cats.....	60
Spratt's Food with Fish and Milk. A complete food for cats.	30
Kit-E-Ration. A balanced ration ready to serve. 1-lb. can 15 cts., 2 for	25
Rival Cat Food. Specially prepared food for cats. 8 1/2-oz. can 10 cts., 3 for	25
Bennett's Crumbs. A food for cats.....	15
Catnip Mouse. Makes kittens playful.....	10
Cat Culture. A complete treatise on the care of cats.....	15



Bird Foods and Remedies

Spratt's Egg-Flake and Fruit Canary Mixture. 15-oz. pkg. \$0 25 Postpaid \$0 30
 Spratt's Cod-Liver Oil Cage-Bird and Nestling Food. For feeding young birds and old birds in the moulting season. A tonic and flesh- and bone-maker. Unequaled as an aid to feather-growth. 4-oz. pkg. 15 20

Spratt's Song Restorer. Invaluable in strengthening the voice. 4-oz. pkg.	25	30
Spratt's Sing-Song. For health and song.....	10	15
Spratt's Tonic for Birds. 1-oz. bottle.....	10	15
Spratt's Parrot Mixture. Combination of carefully selected seeds, etc. 10-oz. pkg.	20	25
Spratt's Pollicrackers. Specially prepared biscuits for parrots. 12-oz. pkg.	20	25
Bird Manna. Keeps cage-birds in constant song, improves their plumage, and prevents disease....	15	20
Silver Brand Bird Gravel. 30-oz. pkg.	15	20
Chamberlain's Bird Gravel. 24-oz. pkg.	15	20
Chamberlain's Perfect Bird Food. Canary seed mixture with vegetable and egg flakes. 11-oz. can 25 cts., 55-oz. can.	1 00	1 15
Burnett's Bird Nesting	10	15
Burnett's Canary Louse Powder. 1-oz. pkg.	20	25
Burnett's Unexcelled Bird Food. A song restorer 3 1/2-oz. pkg.	25	30
Burnett's Bird-Wash. For use on canary birds and parrots. Non-poisonous. 3-oz. pkg.	25	30
Burnett's Bird Tonic. For loss of song, weakness, or moulting, asthma or hard breathing and colds. 3-oz. pkg.	25	30
Burnett's Polly Nut Mixture. A combination of seeds, nuts, and grains for parrots. 9-oz. pkg. ..	20	25
Magic Song Restorer and General Health Food. For all seed-eating birds. 6-oz. pkg.	25	30
Dr. Gunnings Universal Bird Tonic. For loss of song, weakness, asthma and all other diseases of cage-birds.	35	40
Justrite Imported Bird Seed. 14-oz. pkg.	20	25
Justrite Love Bird Seed. 14-oz. pkg.	15	20
Justrite Parrot Food and Polly Crackers. 14-oz. pkg.	25	35
Justrite Song Restorer. 3 1/2-oz. pkg.	20	25
Justrite Vitamine Health Food. A body-builder... ..	20	25
Justrite Feather-pulling Food. For all cage-birds..	25	35
Justrite Bird Jelly. For catarrh and colds.....	25	35
Justrite Bird Salve. For sore feet or swollen legs..	15	20
Justrite Bird Tonic. For hoarseness and loss of appetite.....	25	30
Justrite Bird Bitters. For colds.....	25	30
Justrite Moulting Food.....	20	25
Justrite Color and Pepper Food.....	20	25
Recleaned Spanish Canary Seed, in bulk. The genuine Spanish canary seed. Keeps canaries in full song. Lb. 15 cts., 8 lbs. for	1 00	1 20
Large Japanese Bird Rape Seed, in bulk. Lb. 15 cts., 8 lbs. for.....	1 00	1 20
Scott's Canary Seed Mixture, in bulk. Composed of best recleaned Spanish Canary Seed and Japanese Rape Seed. Lb. 15 cts., 8 lbs. for.....	1 00	1 20

Fish Foods

Burnett's Natural Fish Food. Pkg. 10 cts.	
Burnett's Dried Daphnien. Pkg. 10 cts.	
Burnett's Shrimp Fish Food. Pkg. 10 cts.	
Burnett's Tropical Fish Food. Pkg. 15 cts.	
Burnett's Turtle Food. Pkg. 15 cts.	
Justrite Natural Fish Food. Can 10 cts.	
Justrite Tropical Fish Food. Can 10 cts.	
Justrite Imported Pure Shrimp. Can 10 cts.	
Spratt's Wafer Fish Food. Large carton 10 cts.	
Spratt's Tropical Fish Food. 10 cts. each.	
Spratt's Natural Fish Food. Punch-top tin. 10 cts.	
Spratt's Aquarium Cement. 1-lb. tin 35 cts.	

Spratt's Dog Medicines



Tablets for Constipation	Postpaid \$0 60
Sulfur Tablets. For heated blood, etc.	60
Cough Tablets. Generally effect a quick cure.	60
Astringent Tablets for Dogs. To relieve diarrhea	60
Special Tablets. A diuretic and stimulant.	I 00
Ear Canker Ointment. For both internal and external forms of this disease.	75
Eye Lotion Tablets. A safe and efficient remedy.	60
Flea Powder. For dogs, cats and other animals	30
Mange Medicine	75
Purgative Tablets. Perfectly safe and effective.	60
Tonic and Condition Tablets. To build up after sickness.	60
Worm Capsules for Puppies	60
Worm Capsules for Dogs	60
Dry Cleaning Powder	30
Dog Soap (White). For fleas, lice, etc.	25
Antiseptic Germicidal Flea Soap	30
Liquid Shampoo. Also recommended for use by humans.	30
Chalk Block. For dry cleaning dogs and cats	25

Glover's Imperial Dog Medicines

Puppy Capsules. To expel round and hookworms.	Postpaid \$0 60
Round Worm Vermifuge. For puppies, dogs, foxes, and cats.	60
Round Worm Capsules. For puppies, dogs, and foxes.	60
Tapeworm Capsules. For puppies, dogs, foxes, and cats.	60
Tetrachlorethylene Capsules. For hookworms and round worms in puppies, dogs, foxes, and cats	60
Condition Pills. Stimulant, digestive, appetizer, tonic.	60
Laxative Pills. For sluggish bowels and acute constipation.	60
Diarrhea Mixture. To check looseness of the bowels from simple inflammations and improper feeding.	60
Compound Sulphur Tablets. Act upon the kidneys and intestines.	60
Nerve Sedative. For fits and convulsions.	60
Mange Medicine for Sarcoptic Mange. Local application for mange and chronic eczema of dogs.	75
Kennel and Flea Soap. Kills fleas and lice.	25
Medicated Soap. A cleansing bath soap for house dogs.	30
Flea and Insect Powder. For animal and household use.	50

Free Dog Book for Distribution

Q-W Dog Remedies

Condition Powder. A general conditioner.	I 00
Cough Mixture. Often gives immediate relief.	65
Sedative Tablets. For treatment of fits.	95
Tapeworm Mixture. Will not injure most delicate dog.	I 00
Worm Capsules. For large round worms.	65
Worm Mixture. Quick, sure and safe.	65
Insect Powder. Kills instantly fleas and lice.	50
Sarcoptic Mange Lotion. Dressing for mange and itch.	I 00
Dog Soap. Has a pure, clean, pleasant odor.	35
Tonic. For loss of appetite, etc.	65
Constipation Pills. A quick, safe laxative.	65

Rex Hunters Condition Powders. A well-balanced blood-purifier. Improves the appetite, prevents and overcomes scratching, eczema, etc. Pkt. of 8 capsules, 25 cts.

Karswood Dog Condition Powders. Suitable for all breeds of dogs at all ages. Keeps dogs in splendid condition. Give a dose once every week. Pkt. of 12 powders, 35 cts.

Karswood Worm Powders. For puppies and medium- and large-sized dogs. Pkt. of 6 powders, 50 cts.

One Spot Flea Killer. Kills fleas and lice on dogs and cats. Safe and effective. 1-oz. tin 25 cts., 3-oz. tin 50 cts.

Itch-A-Way. Used for itching and scratching, eczema, skin irritations and sarcoptic mange. An ointment. 3/4-oz. tin 15 cts., 3-oz. tin 50 cts.

Trix Repellent. Repels dogs when females are in season. 1-oz. bottle 50 cts.

Pulvex Pine Oil Disinfectant. For use in the home and kennel. Has a pleasant odor. 8-oz. tin 50 cts., 1-gal. can \$2.50.

Sergeant's DOG MEDICINES

Special Medicine. For treating fever in cases of distemper.	Postpaid \$1 20
Mange Medicine. For treating skin diseases.	65
Condition Pills. A tonic and alterative for pups and dogs.	60
Sure-Shot Liquid. For pups and older dogs. For owners who prefer a liquid vermifuge for round worms.	60
Expectorant Medicine. For coughs and colds.	60
Puppy Capsules. For round and hookworms in pups and dogs weighing less than 10 pounds.	60
Eye-Wash. For treating eye trouble in pups and dogs.	60
Sure-Shot Capsules. For round worms, pinworms and hookworms in pups and dogs weighing over 10 pounds.	60
Tapeworm Medicine. For tapeworms in pups and dogs.	60
Arsenic and Iron Pills. A blood purifier. For treating blood and skin diseases.	60
Canker Wash. For treating internal and external ear canker.	60
Mouth Wash. For treating sore mouth and black tongue.	60
Pepsin Tablets. (Compound.) For treating indigestion, vomiting, and colic in pups and dogs.	60
Intestinal Astringent. For treating diarrhea and dysentery in pups and dogs.	60
Diuretic Pills. An aid in treating rheumatism and lumbago in pups and dogs. Stimulates urinary action.	60
Laxative Capsules. For treating constipation.	60
Carbolic Tar Soap. A splendid all-purpose soap.	25
Skip-Flea Soap. A wonderful bath soap for pups and dogs. Will kill fleas, lice, and certain other vermin.	25
Skip-Flea Powder. For fleas and lice on dogs and cats.	25
Pine Oil Disinfectant. For general use. 12-oz. bottle.	60

Sergeant's Dog Book Free. Ask for it.



Dr. Daniel's Medicines for Dogs and Cats



H. B. O. Liquid for hair-balls in cats.	\$0 65
V. M. Capsules. Vitamins for dogs and cats.	50
Worm Specials:	
Liquid Worm Drops. For cats and toy dogs.	50
Worm Drop Capsules. For cats, toy and small pups.	65
Puppy Vermifuge Capsules. For worms in pups.	65
Worm Expeller Capsules. For large dogs.	65
Loose Catnip. All leaves and blossoms.	15
Catnip Ball. Exerciser for cat.	15
Acobel Wafers. For distemper—colds in cats and puppies.	50
Condition Tablets. Restorative for dogs.	65
Dervide Tablets. For fits and convulsions.	50
Dog and Flea Soap.	25
Katonic. A great tonic for cat or kitten.	25
Laxative Tablets. For dogs or cats.	50
Tonic Pills. A condition pill for cats, toy dogs, and pups.	65

Dr. LeGear's Dog Prescriptions

Cod-liver Oil Concentrate Tablets. Prevents rickets and promotes proper bone-development. Excellent tonic for convalescent animals. 35 tablets 50 cts., 90 tablets \$1.	
Round- and Hookworm Capsules for Small Dogs. 15 capsules 50 cts.	
Round- and Hookworm Capsules for Medium-Large Dogs. 10 capsules 50 cts.	
Tapeworm Tablets. 15 tablets 50 cts.	
Mange Prescription (Sarcoptic). 6 oz. 50 cts.	
Tonic Condition Tablets. Stimulant to appetite. 25 tablets 50 cts.	
Kennel Disinfectant. 6 oz. 50 cts.	
Flea and Lice Powder. 1 1/2 oz. 25 cts.	
Flea and Shampoo Soap. 3 3/4 oz. 25 cts.	
Laxative Tablets. 30 tablets 50 cts.	
Pepsin Compound Tablets. Aid to digestion. 25 tablets 50 cts.	
Special Fever Tablets. For reducing fever. 30 tablets \$1.	
Nerve Sedative Tablets. 20 tablets \$1.	

Bee Brand Shampoo. Kills fleas on dogs and cats.	\$0 35
Bee Brand Flea Powder. Safe and non-irritating.	35
Delcreo. For treating fever in pups and dogs.	I 50

INDEX

	Page
Adco	58
Ant Killers	62
Anti-Cow Kickers	117
Ash Sifter	86
Asparagus Cutter	68
Auxilin	64
Axes	70
Bale Ties	104
Barb Wire	86
Barn Equipment	114
Battery Brooders	122
Bee Supplies	118,119
Binders, Grain	104
Binder Twine	105
Bird Foods and Remedies	142
Boilers, Dairy	114
Bone Cutters	128
Books	37,134,141
Bottle Cappers and Fillers	114
Bottle Cases	113
Breast Yokes	110
Brooders	120-122
Brooms, Stable	116
Brushes, Dairy	113
Bulbs, Summer-flowering	38-41
Bull Rings	116
Bull Staff	116
Bush Hooks	70
Butter Bowls	113
B-K Disinfectant	117,137
Cabbage Plants	8
Calf Feeders	117
Calf Weaners	116
Caponizers	131
Carbola	134
Cat Food and Medicines	142
Cel-O-Glass	130
Chick Boxes	130
Chick Feeders and Fountains	124-127
Chicks	121
Churns	112
Cider Mills	107
Clipping Machines	115
Cod-Liver Oil	134
Concrete Mixer	106
Coops	123,128
Corn Cribs	90
Corn Grader	96
Corn Huskers	90
Corn Knives and Hooks	103
Corn Planters	96
Corn Shellers	107,128
Cow Ties	116
Crates, Fruit and Vegetable	108
Cream Separators	112
Cultivators	68,75,97,100,101,102
Dairy Pails	113
Dehorner	117
Dibbles	68
Dirt Bands and Pots	83
Dog Foods and Remedies	138-143
Doubletrees	110
Drills	100
Dusters	79,80
Egg Basket	129
Egg Boxes and Crates	130
Egg Candler	131
Egg Cleaner	131
Egg Preserver	136
Egg Scale	131
Egg Tester	129
Ensilage Cutters	103
Farm Trucks	106
Feed-Cutters	103
Fence	84,85,87
Fence Posts	84,86
Fertilizers	56-59
Fertilizer Sowers	58,59,70,91,97
Field Seeds	52-54
Fish Foods	142
Flower Box	67
Flower Pots	67,83
Flower Seeds	2d and 3d Cvs., 24-37

	Page
Flower Shears	67
Fly Sprays	117
Forks	68
Fruit Packages	108
Fruit Picker	108
Fruit Press	107
Fruit Trees and Plants	50,51
Garlic	16
Gates	85,87
Gladiolus Bulbs	40
Glass	82
Glass Cloth	130
Glazing Compound	82
Glazing Points	82
Gloves	79
Grafting Wax	64
Grain Cleaners	106
Grain Cradles	105
Grain Drills	98
Grape-Vines	51
Grass Catchers	71
Grass Hooks	69,70
Grass Seed	2,3
Grass Seeders	97
Grass Shears	69
Grinders, Tool	109
Grinding Mills	104,128
Grindstones	109
Harness Soap	117
Harrows	92-94

	Page
Leg Bands	129
Lice Killers	135-137
Lime Sowers	97
Lime Sulphur Hydrometers	61
Litter Carrier	114
Mail-Boxes	131
Manure Spreader	98
Mattocks	68,70
Measures, Dry	82
Milk Bottle Basket	113
Milk Bottle Caps	116
Milk Bottles	113
Milk Cans	113
Milk Cooler	114
Milk Filter Discs	113
Milking Tubes	116
Milk Scales	116
Milk Strainers	113
Milker	115
Mills, Grinding	104,128
Mole Traps	62
Mowers, Field	104
Mowers, Power	72,73,75
Mushrooms	21
Nails	86
Neck Yokes	110
Nest-Eggs	129
Nests	124,129
Onion Sets	16
Paint	82,108

	Page
Rabbit Feeders	127
Raffia	67
Rakes, Garden and Lawn	69
Rakes, Hay	104
Rat Exterminators	62
Rat Traps	129
Respirators	64,76
Roach Powder	62
Rock-Garden Plants	48,49
Rollers, Land	91
Rollers, Lawn	75
Roof Cement	108
Roofing	108
Root-Cutters	107,128
Rope	105
Roses	42-44
Rubber Bands	82
Salt	117,137
Saw Mills	90
Saws, Wood	106,110
Scalecide	66
Scales	111,116
Scrapers, Drag	94
Scrapers, Poultry-House	129
Scythes and Snaths	70
Scythe Stones	109
Seed Cleaner	106
Seed Disinfectants	63
Seed Drills	98,100
Seed Inoculation	63
Seed Sowers	70,97,100
Seeds, Field	52-54
Seeds, Flower	24-37
Seeds, Vegetable	4-23
Shearing Machines	115
Sheep Manure	59
Sheep Shears	69
Shovels	70
Shrubs, Flowering	46,47
Sieves	70
Singletrees	110
Soil Testers	58
Spades	68
Sparrow Trap	131
Sprayers	74,76,77,78,79
Sprinklers	74,75
Stakes	67
Stalls	114
Stanchions	114
Stock Remedies	117
Strawberries	51
Teat Instruments	116
Tedders	104
Thermometers	82,117,129
Thrashers	90
Time-Switch	130
Tires	90
Tobacco Dust	64
Tool Grinders	109
Tractors	90,99,101
Transplanters	97
Tree Paint	64
Tree Scraper	81
Tree Trimmer	80
Trees	47,50
Trellis	85
Trowels, Garden	68
Vegetable Seeds	4-23, 4th Cov.
Vegetable Tyers	82
Vegetable Washers	82
Ventilators	123
Vines	45
Wagons	106
Water Bowls	114
Water Glass	136
Water Plants	39
Water Systems	111
Watering Pot	67
Wedges	110
Weed Burner	76
Weed Killers	62
Weeders	68,98
Wheelbarrows	70
Wheels, Wagon	106
Whitewashing Machines	79
Window Frames	123
Wire and Wire Stretchers	86

SECTIONAL INDEX

	PAGES
VEGETABLE SEEDS	4-23, 4th Cov.
FLOWER SEEDS AND BULBS	2d Cov., 24-41, 3d Cov.
LAWN GRASS SEED	2, 3
NURSERY STOCK	42-49
FRUIT TREES AND SMALL FRUITS	50, 51
FARM SEEDS AND SEED POTATOES	52-55
FERTILIZERS AND INSECTICIDES	56-66
LAWN AND GARDEN TOOLS	67-83
FENCING AND FENCE MATERIALS	84-87
AGRICULTURAL IMPLEMENTS AND SUPPLIES	88-111
DAIRY EQUIPMENT AND SUPPLIES	112-117
BEE SUPPLIES	118, 119
POULTRY EQUIPMENT AND SUPPLIES	120-137
DOG AND PET FOODS AND SUPPLIES	138-143
BOOKS	37, 134, 141

Harvesting Machinery	104
Hay Knives	103
Hay Loaders	104
Hay Presses	90
Hay Tools	105
Hedge Plants	45
Hedge Shears and Trimmers	69
Herbs	13
Hoes	68,100,101
Hormodin A	64
Horse-radish Roots	13
Hose, Garden and Spray	74
Hose Reel	74
Hotbed Supplies	82,83
Hotkaps	83
Hygrometers	129
Incubator-Brooder Extras	127
Incubators	120
Insecticides, Fungicides	60-62, 64-66
Kennels	141
Kow Kare	117
Labels	67
Ladders	108
Lanterns	130
Lawn Cleaner and Rake	75
Lawn Edger	69,71
Lawn Fence	85
Lawn Mower Sharpener	109
Lawn Mowers	71-73,75
Lawn Rollers	75
Lawn Seed	2,3
Lawn Tamp	69
Lawn Trimmer	69,71,75
Laying Battery	123

Paradichlorobenzine	64
Parchment Paper	116
Peat Moss	58
Peonies	41
Perennials, Hardy	48,49
Pheasant Feed	133
Picking Bag	108
Picks	70
Planet Jr. Tools	100
Plant Boxes and Tubs	67,83
Plant Supports	67
Plows	88-90
Plows, Shovel	102
Post-Hole Diggers	110
Posts	84,86
Potato Digger	95
Potato Grader	95
Potato Hook	68
Potato Planter	95
Potato Scoop	70
Potatoes, Seed	55
Poultry Feeders	124-126,127
Poultry Feeds	132-133
Poultry Fence	85
Poultry Fountains and Waterers	124,125,126,127
Poultry Fountain Heaters	127
Poultry-House Heater	124
Poultry Killers	131
Poultry Litter	134
Poultry Remedies	134-137
Power Charger	111
Pruning Tools	80,81
Pulleys	105
Pulverizers	91
Pumps	77,79,111



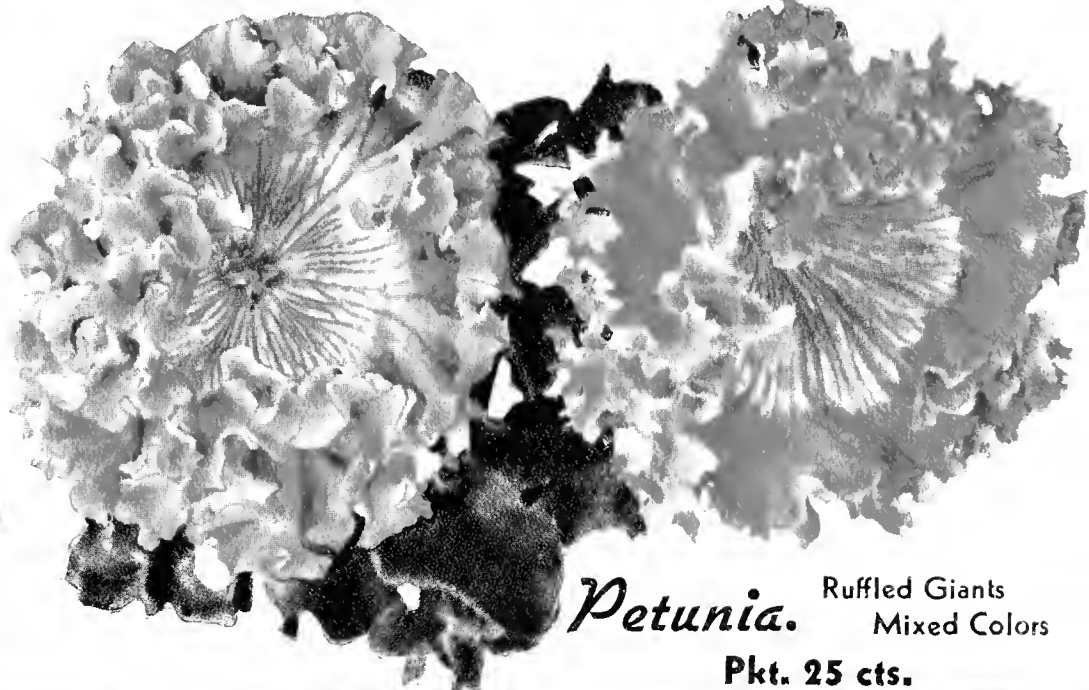
Salpiglossis. MIXED COLORS
Pkt. 15 cts.

①

②

③

④



Petunia. Ruffled Giants
Mixed Colors
Pkt. 25 cts.

ONE PACKET EACH
OF THESE

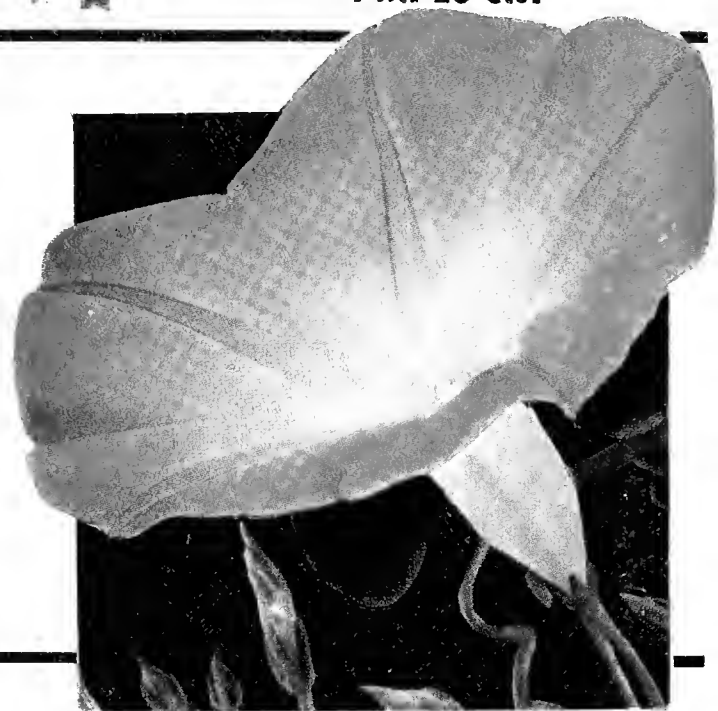
9 Varieties

for

\$1.65

(\$2.05 Value)

COLLECTION B

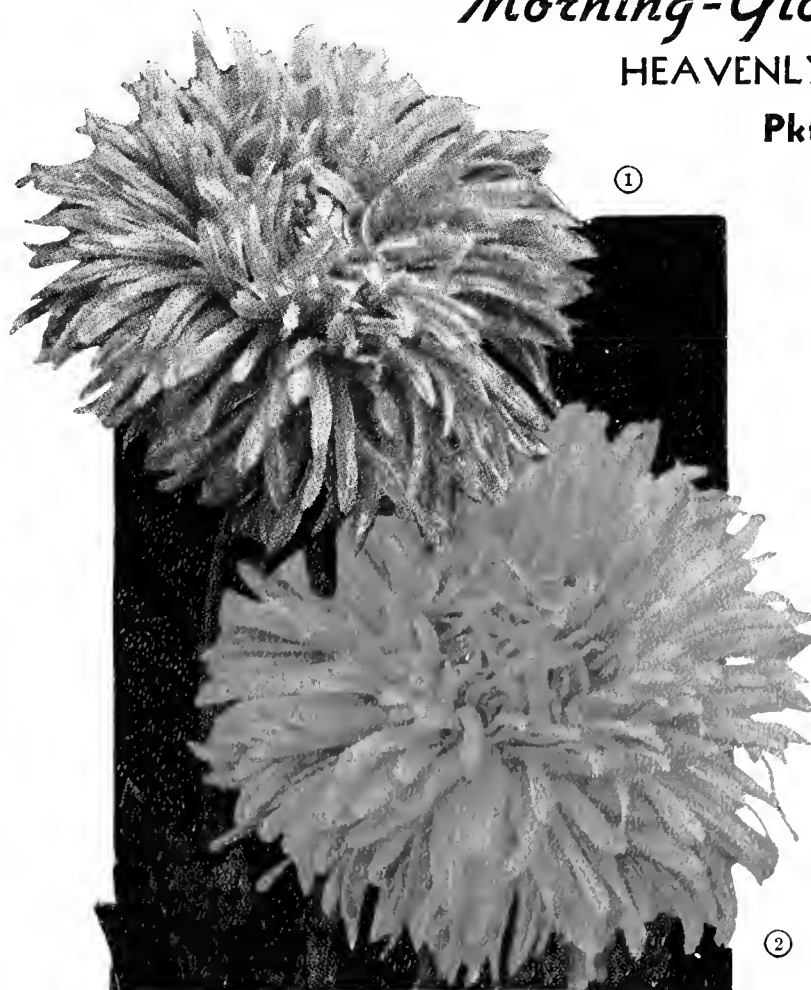


Morning-Glory

HEAVENLY BLUE

Pkt. 15 cts.

①



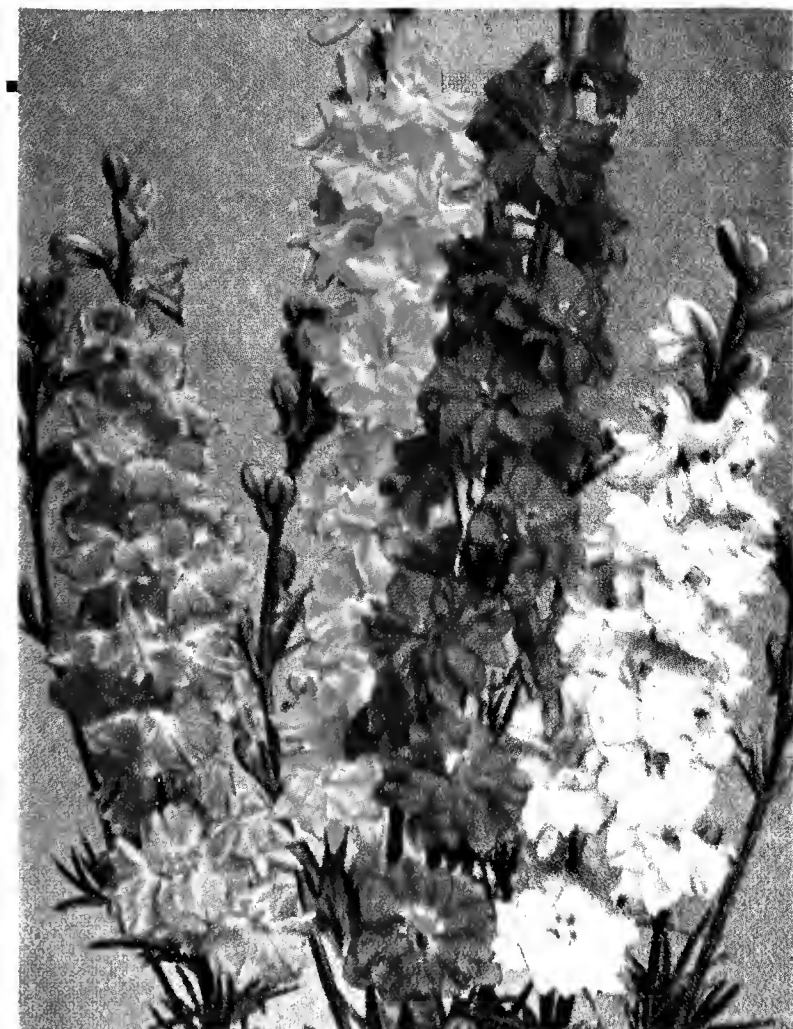
Aster

GIANTS OF
CALIFORNIA

1. Light Purple
Pkt. 25 cts.

2. Carmine-Rose
Pkt. 25 cts.

②



Larkspur. GIANT IMPERIAL
Each, pkt. 25 cts.

1. Blue Bell

2. Miss California

3. Blue Spire

4. White King



Beans

TENDERGREEN

$\frac{1}{2}$ pt. 20 cts.
pt. 35 cts., qt. 65 cts.

Radish

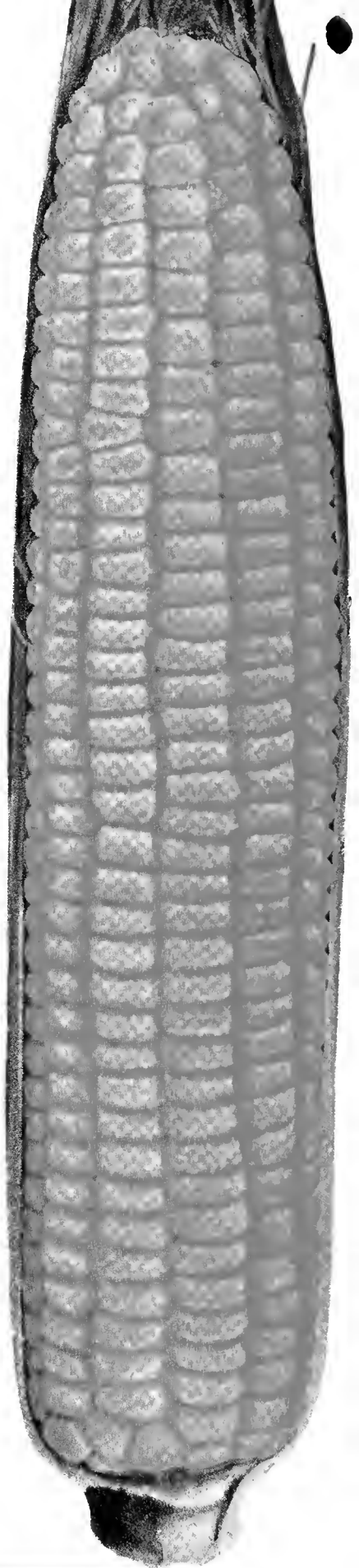
EARLY SCARLET GLOBE

Pkt. 10 cts.
oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.

Corn

GOLDEN CROSSBANTAM

$\frac{1}{2}$ pt. 30 cts.
pt. 45 cts., qt. 75 cts.



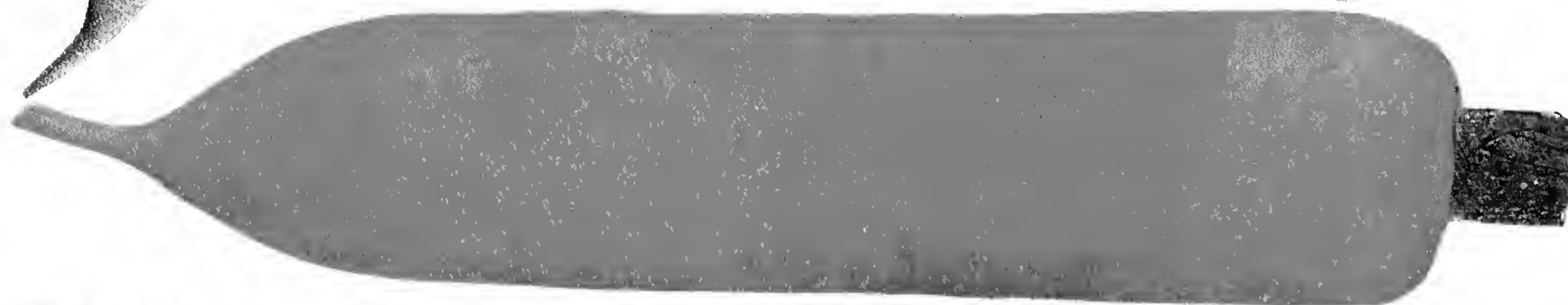
Beet

EARLY WONDER

Pkt. 10 cts.
oz. 15 cts.
 $\frac{1}{4}$ lb. 40 cts.



Carrot. **SUPREME HALF-LONG**
Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts.



The I. W. SCOTT COMPANY

500 LIBERTY AVE. • 113 DIAMOND ST. • PITTSBURGH, PA.